# MA4000 Installation Manager

# **User Guide**



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1

# Introduction

The MA4000 Installation Manager User Guide provides the information needed to operate the Installation Manager application.

The following topics are included in this chapter:

Chapter Topics

- MA4000 Installation Manager Overview
- How This Guide is Organized
- MA4000 Installation Manager Application Abbreviations

#### **MA4000 Installation Manager Overview**

The MA4000 Installation Manager application is designed to assist our NEC Associates/Partners and our NEC customers in gathering, correlating, customizing, validating and implementing their installation plan. This tool expedites the process of gathering this information, customizing it, and then turning the information into system programming. The number of hours required by a system technician using Maintenance Administration Tools to program the system is greatly reduced using the MA4000 Installation Manager. The larger the system, the greater the benefit.

The MA4000 Installation Manager contains a high level of import and export capabilities allowing sharing of information with many other types of applications. Using these capabilities makes it possible to easily re-use the information in other NEC Unified Solutions, Inc. products, as well as common tools such as Microsoft Excel.

## How This Guide is Organized

Chapter 1 This chapter outlines how to use this manual, including actual manual Introduction organization, chapter layout, keyboard conventions, function keys, and basic terminology for the MA4000 Installation Manager application. This chapter explains the hardware and software requirements of Chapter 2 Getting Started MA4000 Installation Manager, and lists the steps needed to install the application. Chapter 3 This chapter provides an overview of the various interfaces of the Graphical User Interface MA4000 Installation Manager software. This chapter describes the fields and buttons contained in the Project Chapter 4 **Project Information** Information section of the MA4000 Installation Manager software. This chapter describes the fields and buttons contained in the Hardware Chapter 5 Hardware Information Information section of the MA4000 Installation Manager Software. Chapter 6 This chapter describes the fields and buttons contained in the System System Information Information section of the MA4000 Installation Manager software. Chapter 7 This chapter describes the fields and buttons contained in the Advanced Advanced Features Features section of the MA4000 Installation Manager software. This chapter describes the fields and buttons contained in the User Chapter 8 **User Assignments** Assignment section of the MA4000 Installation Manager software. This chapter describes the fields and buttons contained in the Group Chapter 9 Group Assignments Assignments section of the MA4000 Installation Manager software. Chapter 10 This chapter describes the fields and buttons contained in the Circuit Circuit Card Assignments Card Assignments section of the MA4000 Installation Manager software. This chapter describes the fields and buttons contained in the Install Chapter 11 Install section of the MA4000 Installation Manager software. This chapter describes the fields and buttons contained in the Reports Chapter 12 Reports section of the MA4000 Installation Manager software. Chapter 13 This chapter describes the fields and buttons contained in the Productivity Features Productivity Features section of the MA4000 Installation Manager software.

### **MA4000 Installation Manager Application Abbreviations**

CCIS Common Channel Inter-office Signaling

CSR Customer Service Representative

DM Data Memory

DTI Digital Trunk Interface

FCCS Fusion Call Control Handling

FCH Fusion Call Handler

GUI Graphical User Interface

IM Installation Manager

*IM Project (or just Project)* A project is the set of data that is associated with a specific installation.

It is assumed that an installation corresponds to a single customer. Therefore, each customer/installation should have its own project.

A project is not stored in a single file as you might expect (as it is in Microsoft Access or Microsoft Excel). As data is collected, the

information is stored in the Microsoft Desktop Engine (MSDE) which is a server-based database. The management of this information will require some features within the application to access, remove, and backup this

information.

IM Project Template This is the database containing all information for a particular

installation. It includes all templates, all customer users, and related

information to the installation.

LCN Local Control Node

LDM Local Data Memory

LMG Local Module Group

MAT Maintenance Administration Terminal

MC Media Converter

MG Media Gateway

MPS Multi-Purpose Server

MSDE Microsoft Desktop Engine — a mini SQL Server

NCN Network Control Node

NDM Network Data Memory

UMG Ultra Module Group

2

# **Getting Started**

This chapter lists the hardware and software requirements necessary to operate the MA4000 Installation Manager. The chapter also provides the steps needed to install the MA4000 Installation Manager application.

Chapter Topics

- Requirements
- MA4000 Installation Manager Installation
- Initializing the Flash Card and Installing the System Software (SV7000 MPS Only)

### Requirements



MA4000 Installation Manager contains a feature called **Localization**. This feature is transparent to the user. When a user installs MA4000 Installation Manager, the user will be prompted for different markets (language, basic data, etc.). For example, in order to have a different language, NEC will need to send to the user a package of files containing a utility to translate all the English descriptions to the new language. The user will then need to perform the language translation and modify the basic data to the files, then send it to NEC. After NEC receives the updated package, NEC will re-complle the MA4000 Installation Manager with the new language and basic data.



MA4000 Installation Manager requires Microsoft SQL Server Desktop Engine (MSDE) 2000. If a database server is already installed then you might be required to remove any conflicting database servers. Keep in mind the MA4000 Installation Manager will be compatible with SQL Server 2000 but the operating systems identified in Table 2-1 will not support MS SQL server. A server class operating system is required to support SQL Server 2000.

MSDE 2000 is available to install from the MA4000 Installation Manager CD.

In order for the MA4000 Installation Manager to operate properly, your operating environment must meet the requirements listed in Table 2-1.

Table 2-1 System Requirements

Minimum	Recommended
	Operating System

Windows 98

Note: This is the bare minimum operating system. Windows NT 4.0 (Service Pack 5 or later)

> Windows 2000 (Service Pack 3 or later)

Window XP Professional (Service Pack 1 or later)

**Note:** This is the preferred operation system.

**Note:** Other Windows operating systems may work, but will not be supported because of testing limitations. Users of Windows ME and Windows XP Home Edition will probably be able to successfully run MA4000 Installation Manager but these are not considered business operating systems.

systems.	systems.		
Processor			
Pentium 400 MHz	Pentium 700 MHz		
Memory			
64 MB	128 MB, or more		
Hard Drive Space (available before installation)			
250 MB	300 MB, or more		
Monitor			
800x600 SVGA	1024x768 SVGA		
Web Browser (for support only)			
Any HTML 1.1 compliant	Internet Explorer 5.5, or greater		
Ethern	et Port		
10/100 MB Ethernet Port for connecting to SV7000-T and SV7000S			
Seria	l Port		
For configuration of Periphe	eral Hardware (MC, MG, VS)		
Мос	dem		
For SV7000-T so	ftware registration		
PCMCIA Card Slot			
Intel compatible PCMCIA card slot for use when initializing SV7000-T Flash Card			
Database			
Microsoft MSDE 2000 (Included on CD-ROM)			
Additional Hardware			
CD-ROM	CD-ROM 2x, or higher		
Mouse and 101 Keyboard	Mouse and Keyboard		

### **MA4000 Installation Manager Installation**

To install MA4000 Installation Manager for the first time, use the installation CD included in your MA4000 Installation Manager package. You must run **Setup** from within Windows.



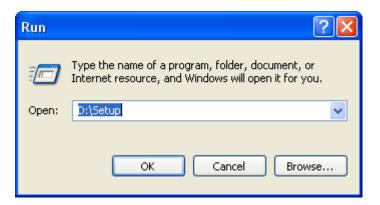
Be sure to close all open Windows programs and screen savers and disable any virus detection programs before using the Setup program.

The following procedure walks you through the MA4000 Installation Manager installation. The Setup consists of a series of dialogs that supply you with default answers to questions regarding the installation of files to your hard disk. To accept the default answers, click the **Next** button. To make changes, click the **Browse** button and select a different directory, then click **OK** button to return to the dialog box.

The following procedure assumes you are starting the Setup program from your computer's CD-ROM drive D:. If you start from a different drive, substitute the letter of that drive in this procedure.

- Step 1 Launch Microsoft Windows 98, Windows 2000 or Windows XP Professional.
- **Step 2** Place the MA4000 Installation Manager CD in the CD-ROM drive.
- Step 3 Click the Windows **Start** button and select **Run....** from the pop-up menu. The *Run* (Figure 2-1) displays.

Figure 2-1 Run



Step 4 Type D:\Setup in the Open text box (as shown in Figure 2-1) and click the OK button. The Installation Manager R25 - InstallShield Wizard Welcome displays (Figure 2-2).

Installation Manager R25 - InstallShield Wizard

Installation Manager R25 (Version 25.0.1)

The InstallShield® Wizard will install Installation Manager R25 on your computer. To continue, click Next.

Figure 2-2 Installation Manager R25 - InstallShield Wizard Welcome

- **Step 5** Follow the prompts in the Setup program to accept the software licensing agreement, to enter your customer information, and to select the setup type. The Setup program copies the required files to your hard drive.
- Step 6 The Installation Manager R25 InstallShield Wizard Complete displays (Figure 2-3) after the Setup program has finished copying files to your hard disk.

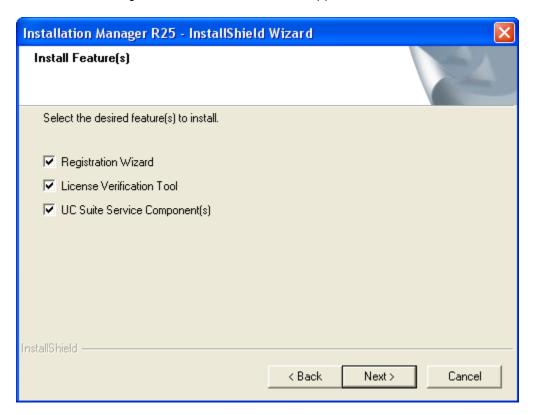
InstallShield Wizard Complete
Setup has finished installing Installation Manager R25 on your computer.

| Back | Finish | Cancel |

Figure 2-3 Installation Manager R25 - InstallShield Wizard Complete

**Step 7** Click the **Finish** button. The *Installation Manager R25 - InstallShield Install Feature(s)* displays (Figure 2-4).

Figure 2-4 Installation Manager R25 - InstallShield Install Feature(s)



Step 8 Select the appropriate check box to install the desired feature. After MA4000 Installation Manager finishes installing each selected feature, you can now run the MA4000 Installation Manager program.

# Initializing the Flash Card and Installing the System Software (SV7000 MPS Only)



The following procedure contains a step which can result in the **loss** of existing data on your computer if performed improperly. This step is indicated with a **Caution** symbol. If you are unsure whether you understand the step completely, contact the NEC Technical Assistance Center (NTAC) before proceeding.

#### **Introduction and Requirements**

The SV7000 MPS ships with an empty ATA flash card. Before you start the server, you must initialize the card and load it with system software the server requires to run. Then, you use the flash card to transfer the system software to the server itself.

This procedure requires the system software CD (supplied with your system) and a laptop PC with a PCMICIA card slot. *Your laptop PC must be configured to boot from the CD drive*.



To configure your PC to boot from a CD, you may need to change the boot drive order in your computer's BIOS. You can usually display the BIOS settings screen by pressing a specific key during the boot sequence.

For specific information on configuring your laptop to boot from a CD, consult your computer's documentation.

The SV7000 MPS runs the Linux operating system. When you boot from the supplied system software CD, your laptop will also be running Linux. You can then use Linux to initialize the flash card and transfer the MPS system software to it.

You should also be familiar with the NEC Maintenance and Administration Terminal (MAT) application. For specific information on using the MAT, consult its online help documentation.

#### **Major Tasks**

The following lists the major tasks you will complete when you initialize the flash card and load system software on the MPS:

- Boot your laptop from a CD containing the Linux operating system.
- Use the Linux command line interface to format the flash card.
- Copy the MPS operating system files to the flash card.
- Insert the flash card in the MPS server.
- Connect your laptop directly to the MPS.
- Copy the system software from the flash card to the MPS.
- Specify the MPS' new TCP/IP network settings.
- Restart the MPS using the new network settings.

#### Step-by-Step Procedure

To initialize the flash card, install it in the server, and load the MPS system software do the following:

- Insert the MPS system software CD into your computer, then reboot. Step 1
  - —Linux status messages display, followed by a video mode prompt.
- Step 2 Press **Space** to accept the default video mode. A keyboard selection prompt displays.
- Press Enter to accept the default keyboard configuration. A Linux Step 3 command prompt displays.
- Enter **root** as the login ID, then enter **xxxx** as the password (the Step 4 password entry will not display on the screen).
  - —The Linux command prompt changes to #, indicating you are logged in as a root user.



You must enter these values exactly as they are shown here because the Linux operating system, unlike Windows, is case-sensitive. That is, root and Root are not identical.

Be careful to enter the values in the remaining steps exactly as they are shown, including spaces.

Step 5 Type the following at the command prompt, then press **Enter**:

#### /bin/dmesg | grep hd

- -A list of configured devices on your PC displays, designated hda, hdb, hdc, etc.
- Step 6 Use the list of displayed devices to locate your laptop's hard drive and CD-ROM drive. Write down their designations (hda, hdc, etc.) so you will remember them.



It is critical you correctly identify your CD-ROM and internal hard drive from the list of displayed devices. You will need the correct designation in later steps to select which device will be formatted.

Linux identifies drives on your computer with the hd designation, plus a letter starting with a and continuing alphabetically. Commonly, the internal hard drive is hda and the internal CD-ROM is hdc. However, your configuration may be different. You can identify your drives using the information displayed after the previous step. For example, here is a possible drive listing:

hda: HTS54809349, ATA disk drive

hdc: Samsung CDRW-DVD, ATAPI CD-ROM drive hda: HTS54809349, 76319MB w/ 7877kB cache hdc: ATAPI 24X DVD-ROM CD-RW drive, 2048kB cache

hda: hda1, hda2

This listing shows the internal 80MB hard drive as hda. You can easily identify the CD-ROM drive as hdc.

**Step 7** Type the following at the command prompt, the press **Enter**:

#### mount /dev/hdc /mnt/cdrom

Replace **hdc** in the command, if necessary, with the designation your laptop uses for the internal CD-ROM device.

- —Linux mounts the CD-ROM and informs you the device is read-only.
- **Step 8** Type the following at the command prompt, then press **Enter**:

#### /mnt/cdrom/MKINIT

After a few moments, the **MKINIT finish** message displays.

- Step 9 Insert the flash card in your laptop's PCMCIA card slot.
  - —Linux reads the card and displays its size and drive designation (hde, etc.). You will need this drive designation in Step 11.
- Step 10 Press Enter to return to the command prompt (#).



This next step will destroy any existing data on the specified device. Be certain you have not entered the designation for your laptop's hard drive when typing this command

**Step 11** Type the following at the command prompt, then press **Enter**:

#### MK\_FLASH hde

Replace **hde** in the above command, if necessary, with the drive designation your laptop displayed for the flash drive after you inserted the card.

- —You can ignore the **DriveReady** and **DriveStatus** error messages.
- —The write finish status message displays when the flash card initialization completes. This process may take 20-30 minutes.
- **Step 12** Remove the flash card from your laptop.
  - —You can ignore the resulting error messages.
- **Step 13** Type the following at the command prompt, the press **Enter**:

#### exit

- Step 14 Remove the MPS system software CD from your laptop.
- **Step 15** Reboot your laptop in the normal manner.
  - —After it reboots, it should be running the Windows operating system.
- Step 16 Be sure the MPS is OFF, then insert the flash card in the appropriate slot.
- Step 17 Turn the MPS ON.

- **Step 18** Connect an ethernet cable between your laptop and the **Ether1** jack on the front of the MPS.
  - —You must use a crossover Ethernet cable, not the more common straight-through type.
- **Step 19** On your laptop, open the Network (or Network Connections) control panel.
- Step 20 Change your laptop's network settings to the following:

IP Address: 192.168.0.5 Subnet Mask: 255.255.255.0 Default Gateway: 192.168.0.254

- Step 21 Close the network control panel to save the new settings.
- Step 22 Launch the PC Pro by doing one of the following:
  - —Open Installation Manager, then select **PCPro...** from the Tools menu.
  - Locate the PCPro application on your hard drive (if previously installed) and launch it.
- **Step 23** Log on to the MPS using its default IP (192.168.0.1), leaving the user and password fields blank.
- **Step 24** Enter the **ADTM** command in the PCPro to display the default switch configurations.
- **Step 25** Change the MPS' IP address, subnet mask, and default gateway address to the appropriate values for your network.
- Step 26 Click Apply.



Even though the values appear to revert to their default values, they have in fact been changed. This is because although you have changed their value in the MPS's memory, they have not yet been stored to the flash card.

- Step 27 Enter the SINZ command in the MAT, then select System Initialize (Reboot).
- Step 28 Click Execute. A confirmation dialog displays.
- Step 29 Click Yes. The MPS reboots.
  - —During this time the ACT light flashes GREEN and the Load light is RED.
  - —The MPS is not ready until the **ACT** light remains solid GREEN.
- **Step 30** Change your laptop's TCP/IP network settings back to their original values for use on your network.

3

# **Graphical User Interface**

This chapter provides an overview of the components of the MA4000 Installation Manager software.

The following topics are included in this chapter:

Chapter Topics

- General Graphical User Interface Features
- Startup Dialog
- Pull-Down Menus
- Primary Sections

### **General Graphical User Interface Features**

#### **Data Navigator**

The Data Navigator control allows you to easily go from item to item in a list. There are buttons allowing you to go to the beginning and the end of the list using a single button click.

The Data Navigator always displays information in the form [last selected row] of [total rows] (see Figure 3-1).

Figure 3-1 Data Navigator Single Select example

Last Name ∇	First Name	Organization
ADAM	MIKE	Accounting - Reci
ADAM	STEVE	Engineering - Hard
ADAMS	JOHN	Accounting - Final
ADAMS	JAMES	Accounting - Paya
BILL	JOHN	Engineering - Soft
BILL	JAMES	Engineering - Soft
BLDG-A	CONFERENCE ROOM	
BLDG-B	CONFERENCE ROOM	
BREAK ROOM		
CODA	FINLEY	Accounting - Reci
SMITH	SANDY	Accounting - Final
SMITH	BETTY	Accounting - Paya
SMITH	JOHN	Engineering - Hard
SMITH	MIKE	Accounting - Reci
WILLIAMS	MARGARET	Accounting - Final
WILLIAMS	.IASON	Accounting - Final

If multiple rows are selected the display will be listed in the form [last selected row] of [total rows] (see Figure 3-2).

Figure 3-2 Data Navigator Multi Select example

Last Name ∇	First Name	Organization
ADAM	MIKE	Accounting - Rece
ADAM	STEVE	Engineering - Hard
ADAMS	JOHN	Accounting - Finan
ADAMS	JAMES	Accounting - Payal
BILL	JOHN	Engineering - Softv
BILL	JAMES	Engineering - Softv
BLDG-A	CONFERENCE ROOM	
BLDG-B	CONFERENCE ROOM	
BREAK ROOM		
CODA	FINLEY	Accounting - Rece
SMITH	SANDY	Accounting - Finan
SMITH	BETTY	Accounting - Payal
SMITH	JOHN	Engineering - Hard
SMITH	MIKE	Accounting - Rece
WILLIAMS	MARGARET	Accounting - Finan
ZATLIVMG	IVGUN	Accounting - Finan

**Example:** If the list is displaying Row #1 at the top of the list, and the user has made the selections from top to bottom, the last row selected would have been Row #12.

#### Selecting

All list boxes will support the ability to multi-select items. There are two ways to multi-select items:

**Step** To select a range of rows that are consecutive:

- —Select the first item in the range
- —Hold the Shift key and select the last item in the list. All items in between will be selected. In Figure 3-3, the fourth item in the list and then the seventh item were selected while holding the Shift key. All items between were selected.

Figure 3-3 List Box Contiguous Select example

Last Name ∇	First Name	Organization
ADAM	MIKE	Accounting - Rec
ADAM	STEVE	Engineering - Har
ADAMS	JOHN	Accounting - Fina
ADAMS	JAMES	Accounting - Pay-
BILL	JOHN	Engineering - Soft
BILL	JAMES	Engineering - Soft
BLDG-A	CONFERENCE ROOM	
BLDG-B	CONFERENCE ROOM	
BREAK ROOM		
CODA	FINLEY	Accounting - Rec
SMITH	SANDY	Accounting - Fina
SMITH	BETTY	Accounting - Pay-
SMITH	JOHN	Engineering - Har
SMITH	MIKE	Accounting - Rec
WILLIAMS	MARGARET	Accounting - Fina
LW/ILLIAMS	.ΙΔΩΝ	Δecounting - Fina

Step

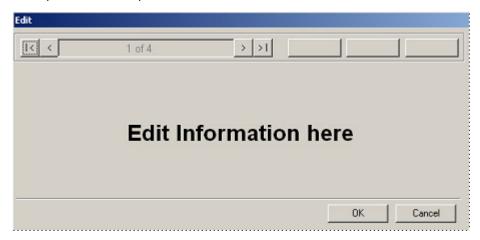
Another method is to choose multiple items by selecting rows while holding the **Control** key. This allows the selection of non-consecutive items. In Figure 3-4, the fourth, sixth, and eighth items were selected.

Figure 3-4 List Box Multi-Select example

Last Name ∇	First Name	Organization
ADAM	MIKE	Accounting - Rece
ADAM	STEVE	Engineering - Hard
ADAMS	JOHN	Accounting - Finar
ADAMS	JAMES	Accounting - Paya
BILL	JOHN	Engineering - Softu
BILL	JAMES	Engineering - Softu
BLDG-A	CONFERENCE ROOM	
BLDG-B	CONFERENCE ROOM	
BREAK ROOM		
CODA	FINLEY	Accounting - Rece
SMITH	SANDY	Accounting - Finar
SMITH	BETTY	Accounting - Paya

If you choose an operation, such as clicking the **Edit** button, you will be editing all the selected records in a smaller list. Figure 3-5 displays how this would appear if you chose four items from the list, and then clicked the **Edit** button.

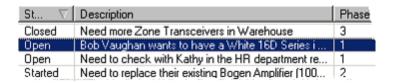
Figure 3-5 Edit Multiple Records example



#### **List Box Sorting**

All lists will have the ability to sort. Clicking on the title bar of a column causes the list to be sorted alphabetically by that column. A second click will reverse the sort order. Clicking in a different column will cause the list to be sorted by that column. There will be an arrow in the column currently being sorted. Figure 3-6 indicates the **Status** field is being sorted alphabetically. Another click on the title would cause the sort to reverse and the arrow would be pointing **UP** instead of **DOWN**.

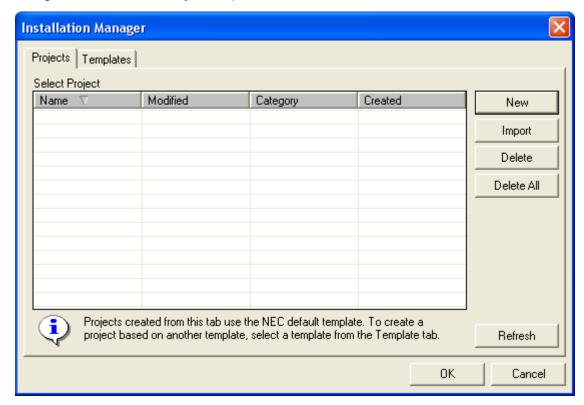
Figure 3-6 List Box Sorting example



## **Startup Dialog**

MA4000 Installation Manager projects are not comprised of a single file like a spreadsheet or document. Instead, the project is consists of information contained in a database. To support this, your are given the *Installation Manager Startup* (Figure 3-7) to perform basic management on MA4000 Installation Manager projects.

Figure 3-7 Installation Manager Startup



#### • Projects tab

The projects listed here were created using the default template.

#### • **Templates** tab

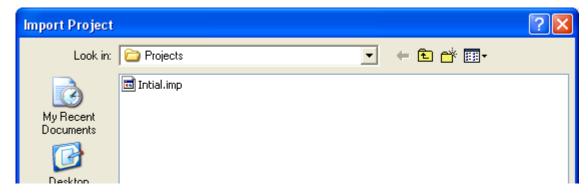
The projects listed under this tab were created using a template based on criteria other than the default template.

You have the ability to have multiple instances of MA4000 Installation Manager running. However, each instance will only be allowed to edit a project that is not already opened.

Once the user opens a project Figure 3-7 disappears. To open another instance of MA4000 Installation Manager, you must return to the shortcut used to launch MA4000 Installation Manager. The MA4000 Installation Manager installation will place a shortcut on the Windows Start Menu.

#### **Projects Tab**

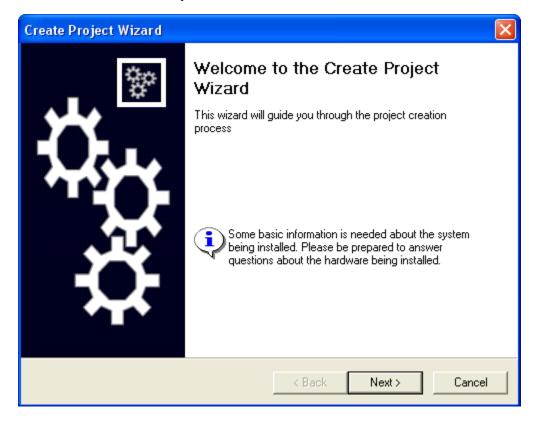
Figure 3-8 Projects Tab



#### **New** button

You will have several choices to make. Some of the most powerful features of MA4000 Installation Manager is the ability to re-use previous data. When a new project is defined, it can be defined from an existing project so you do not have to start with an empty project. Clicking the **New** button displays the *Welcome to the Create Project Wizard* (Figure 3-9).

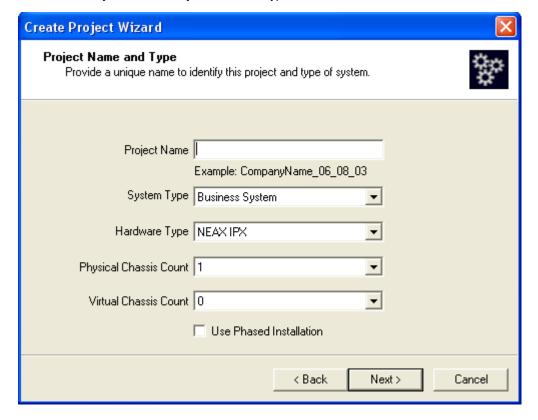
Figure 3-9 Welcome to the Create Project Wizard



#### **Create Project Wizard**

Step 1 The Welcome to the Create Project Wizard greets you and informs you that the wizard will be guiding you through the steps necessary to create a new project. The panel also warns you that some basic information will be needed to complete the wizard. Click the Next button to continue. The Create Project Wizard - Project Name and Type dialog box (Figure 3-10, Figure 3-11, Figure 3-12, Figure 3-13 or Figure 3-14) displays.

Figure 3-10 Create Project Wizard - Project Name and Type - NEAX IPX and NEAX IPX DM



Project Name and Type
Provide a unique name to identify this project and type of system.

Project Name

Example: CompanyName\_06\_08\_03

System Type Business System

Hardware Type NEAX IPX UMG

Use Phased Installation

< Back

Next>

Cancel

Figure 3-11 Create Project Wizard - Project Name and Type - NEAX IPX UMG

Project Name and Type
Provide a unique name to identify this project and type of system.

Project Name

Example: CompanyName\_06\_08\_03

System Type Business System

Hardware Type UNIVERGE IPX

Physical Chassis Count 1

Virtual Chassis Count 0

Use Phased Installation

Figure 3-12 Create Project Wizard - Project Name and Type - UNVERGE IPX

Project Name and Type
Provide a unique name to identify this project and type of system.

Project Name
Example: CompanyName\_06\_08\_03
System Type Business System

Hardware Type UNIVERGE SV7000

Physical Chassis Count 0

System Maximum Capacity 300 ports

Use Phased Installation

< Back

Next>

Cancel

Figure 3-13 Create Project Wizard - Project Name and Type - UNIVERGE SV7000

Project Name and Type
Provide a unique name to identify this project and type of system.

Project Name
Example: CompanyName\_06\_08\_03
System Type Business System

Hardware Type UNIVERGE SV8500
Physical Chassis Count 0
System Maximum Capacity 384 ports

Use Phased Installation

Figure 3-14 Create Project Wizard - Project Name and Type - UNIVERGE SV8500

- **Step 2** The Create Project Wizard Project Name and Type dialog box allows you to enter a name for the project.
  - —Enter the project name in the **Project Name** field. The name must be unique. There must not be any other projects using this name.
  - —Select the system type from the **System Type** drop-down menu.
    - Business System
    - Hospitality System
  - —Select the system type from the **Hardware Type** drop-down menu.
    - NEAX IPX
    - NEAX IPX DM
    - NEAX IPX UMG
    - UNIVERGE IPX
    - UNIVERGE SV7000
    - UNIVERGE SV8500
  - —Select the physical chassis count from the **Physical Chassis Count** drop-down menu.
    - NEAX IPX / NEAX IPX DM / UNIVERGE IPX: 1 to 16
    - UNIVERGE SV7000 / UNVERGE SV8500: 0, 1, 2, 3, and 4

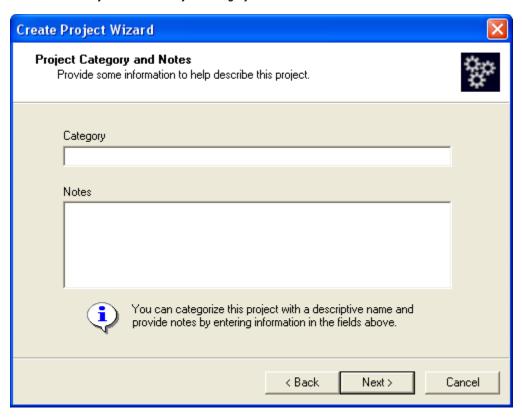


Select the **6U Physical Chassis** check box if your system uses a 6U-size physical chassis. (Not available on NEAX IPX, NEAX IPX DM, or UNIVERGE SV8500)

- · NEAX IPX UMG: None
- —Select the maximum chassis count from the Virtual Chassis Count drop-down menu.
  - NEAX IPX / NEAX IPX DM / UNIVERGE IPX: 0, 1, 2, and 3.
  - NEAX IPX UMG: None
- —Select the maximum system capacity from the **System Maximum Capacity** drop-down menu.
  - NEAX IPX / NEAX IPX DM / NEAX IPX UMG / and UNIVERGE IPX: None
  - UNIVERGE SV7000: 300, 750, 1000, 1500, 2000, 2500, 3000, 3500, 4000, 4500, 5000, 5500, and 6000
  - UNVERGE SV8500: 384, 768, 1152, 1536, 1920, 2304, 2688, 3072, 3456, 3840, 4224, 4608, 4992, 5376, 5760, and 6144
- —Select the Use Phase Installation check box to enable the phased installation.
  - · All Systems Types: Available.

Click the **Next** button to proceed. Figure 3-15 displays.

Figure 3-15 Create Project Wizard - Project Category and Notes



- Step 3 The Create Project Wizard Project Category and Notes allows you to provide additional information about the project, and permits you to categorizing the project.
- Step 4 Click the **Next** button to proceed. Figure 3-16 displays.

Figure 3-16 Create Project Wizard - Customer Locations



Step 5 The Create Project Wizard - Customer Locations is similar to the Customer Organization (Step 6). It allows you to specify locations for all telephone so they can be accurately delivered to the necessary locations. This information is also very important when cabling personnel have to complete the end to end connectivity from the telephone to the Voice Server system.

Click the **Next** button to continue. Figure 3-17 displays.

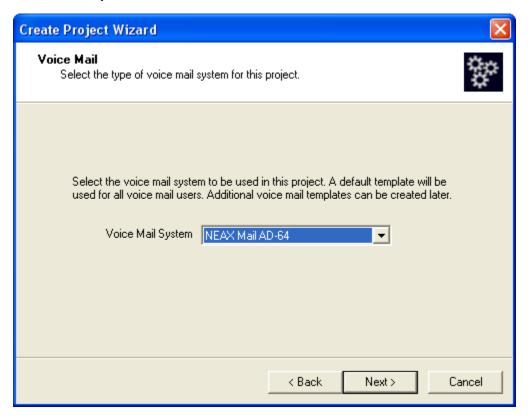
Create Project Wizard **Customer Organization** Provide organization chart information to help manage large amounts of users. ○ Group Level 1 Company Department, Group Level 2 Division Level 3 Department Division, Department, Group Level 4 Group Company, Division, Department, Group C Other Level 5 < Back Next> Cancel

Figure 3-17 Create Project Wizard - Customer Organization

Step 6 The Create Project Wizard - Customer Organization allows you to name the levels in a customer's organization. It is very similar to naming the levels in a company's organizational chart. These levels are used heavily to sort out relevant data. This is particularly powerful when there are large numbers of phones/employees and the user is trying to set up hunt groups based on a department within the company.

Click the **Next** button to continue. Figure 3-18 displays.

Figure 3-18 Create Project Wizard - Voice Mail



**Step 7** The Create Project Wizard - Voice Mail allows you to choose from any supported voice mail system. Current selections include:

#### <None>

### <Other Voice Mail>

**NEAX Mail AD-64** - A voice messaging system providing ViewMail®, ViewMail for Microsoft® Messaging, ViewMail for Lotus® Notes®, ViewMail for GroupWise®, and ViewCall® Plus (Windows 2003-based).

**UM8500 Exchange Message Store** - A voice messaging offering powerful productivity features such as VideoMail, Find Me Follow Me and Desktop Call Control (IP-based).

**UM8500 SQL Message Store** - A voice messaging offering powerful productivity features such as VideoMail, Find Me Follow Me and Desktop Call Control (IP-based).

**UNIVERGE UM4730** - A voice messaging system providing TeLANophy® modules, ViewMail®, ViewMail for Microsoft® Messaging and ViewCall® Plus (PC-based/Linux OS).

Click the **Next** button to proceed. Figure 3-19 displays.

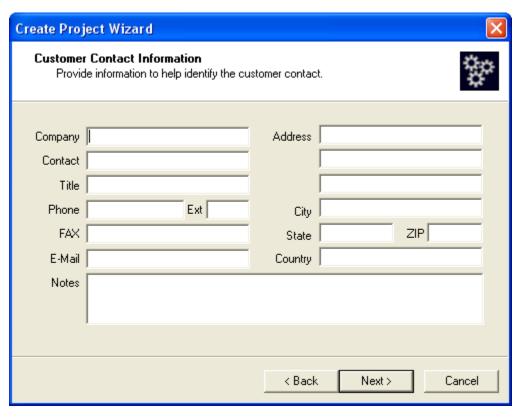


Figure 3-19 Create Project Wizard - Customer Contact Information

**Step 8** The Create Project Wizard - Customer Contact Information allows you to enter details about the customer that is custom to this new project.

Click the **Next** button. Figure 3-20 displays.

Figure 3-20 Completing the Create Project Wizard



**Step 9** The Completing the Create Project Wizard is the last panel you will encounter as part of the Create Project Wizard.

Click the **Finish** button to end the Wizard and return to Figure 3-7.

## • Import button

**Step 1** Click the **Import** button as shown in Figure 3-21.

Figure 3-21 Projects Tab

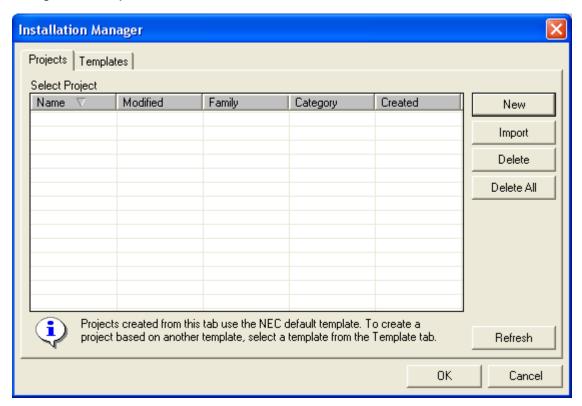
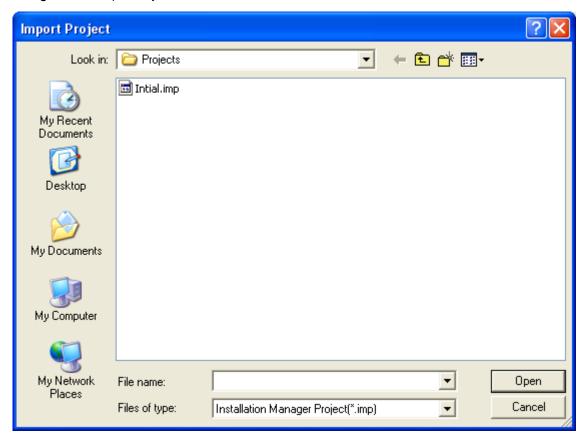


Figure 3-22 displays.

Figure 3-22 Import Project

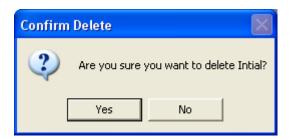


Step 2 Select an existing project and click the **Open** button. The selected project now appears in the **Select Project:** section of the *Installation Manager Startup*.

## • Delete button

- Step 1 Select a project from the list located in the *Installation Manager Startup* (Figure 3-7).
- Step 2 Click the **Delete** button. Figure 3-23 will display.

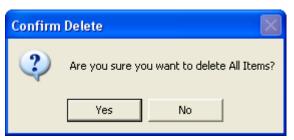
Figure 3-23 Delete Project Confirmation



## • Delete All button

Step Click the **Delete All** button. Figure 3-24 will display.

Figure 3-24 Delete All Projects Confirmation



## • Refresh button



Clicking the **Yes** button deletes a project entirely and removes the project from the database. The project cannot be recovered.

The **Refresh** button performs a new search in the database to discover all projects defined on the current personal computer. The list will be updated with the latest information.

#### OK button

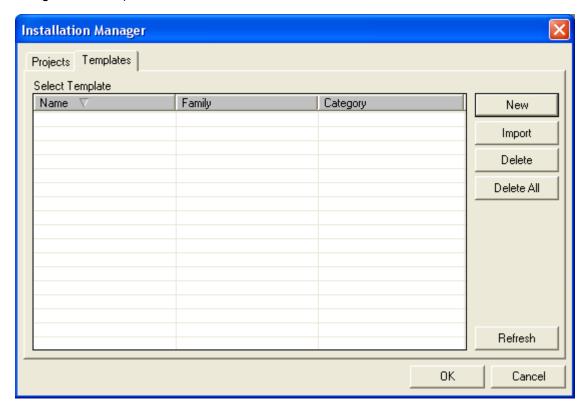
The OK button will open the selected project and make it available for editing.

## • Cancel button

The Cancel button is used to abort opening any project. You will need to re-launch the application using MA4000 Installation Manager shortcut.

# **Templates Tab**

Figure 3-25 Templates Tab



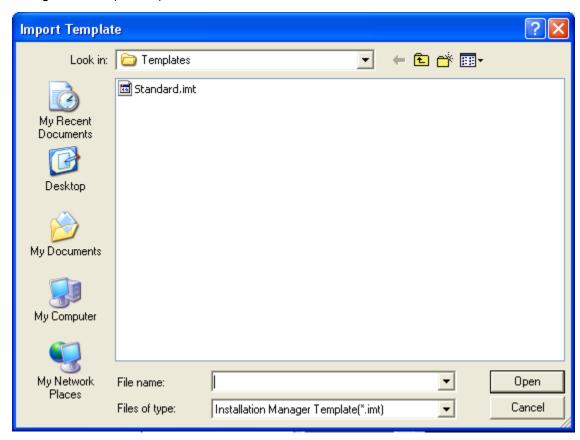
## • New button

Highlighting a template listed in the Select Template: section, and clicking the New button, will show the same Figure 3-9 through Figure 3-20 dialog boxes as the Project Tab displayed. This option provides you the opportunity to modify the imported template to meet your specific requirements.

## • **Import** button

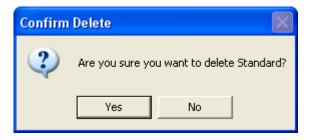
Step 1 Click the Import button. Figure 3-26 displays.

Figure 3-26 Import Template



- **Step 2** Select the template to import from those templates listed, and click the **Open** button.
- Delete button
- Step 1 Select a template from the list located in the *Installation Manager Startup* (Figure 3-7).
- Step 2 Click the **Delete** button. Figure 3-27 will display.

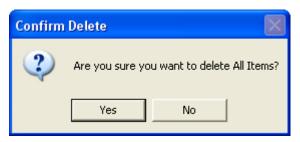
Figure 3-27 Delete Project Confirmation



## • Delete All button

Step Click the **Delete All** button. Figure 3-28 will display.

Figure 3-28 Delete All Projects Confirmation



#### • Refresh button



Clicking the **Yes** button deletes a template entirely and removes the template from the database. The project cannot be recovered.

The **Refresh** button performs a new search in the database to discover all templates defined on the current personal computer. The list will be updated with the latest information.

## • OK button

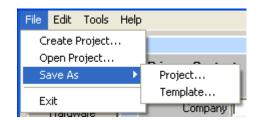
The **OK** button will open the template project and make it available for editing.

## • Cancel button

The **Cancel** button is used to abort opening any template. You will need to re-launch the application using MA4000 Installation Manager shortcut.

# **Pull-Down Menus**

## File Menu



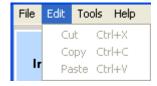
The **File** pull-down menu contains these file functions:

- Create Project...
- Open Project...
- Save As
  - Project…
  - Template...
- Exit

## **Edit Menu**

The **Edit** pull-down menu (Figure 3-29) contains the common functions typically found in stand-alone applications.

Figure 3-29 Edit Menu



# Cut (Ctrl+X)

- Step 1 Select an item (this could be the context of a text box, or it could be multiple items in a list).
- **Step 2** After a selection is made, press the **Ctrl** and **X** keys to place the contents in the Windows Clipboard.
- **Step 3** You can now paste the contents to another location, such as another windows application, or to another location within MA4000 Installation Manager.

# Copy (Ctrl+C)

- Step 1 Select an item (this could be the context of a text box, or it could be multiple items in a list).
- **Step 2** After a selection is made, press the **Ctrl** and **C** keys. A copy of the selected item(s) is placed on the Windows Clipboard.
- Step 3 You can now paste the contents to another location, such as another windows application, or to another location within MA4000 Installation Manager. See Paste (Ctrl-V)

## Paste (Ctrl-V)

- **Step 1** Place the curser in the field or in the row below where the contents of the Windows Clipboard is to be pasted.
- **Step 2** If an item is selected, then the past operation will replace the selected item. In the case of a list box, the contents of the clipboard will be pasted above the cursor location.

The contents of the clipboard must have the same number of columns as the destination list box. If it does not have exactly the same number of columns, the operation will not occur.

## **Tools Menu**

The Tools pull-down menu (Figure 3-30) contains the Flash Card Wizard, Registration Wizard, PCPro, License Verification Tool, Clipboard, and Network Manager functions.

Figure 3-30 Tools Menu

Flash Card Wizard...

Registration Wizard... (Ver.1.20.0.2)

PCPro...

License Verification Tool...

Clipboard...

Network Manager...

## Flash Card Wizard ...



The Flash Card Wizard does not work on MPS due to MPS being Linux-based. See Registration Wizard ... for procedure to upgrade the system.



UNIVERGE SV8500 is not supported by the Flash Card Wizard function.

The **Flash Card Wizard** option provides the tools to:

- Format and write new program files to a new flash card
- Upgrade the program files by reading program files to the personal computer and modifying the files using Explorer to write to the flash

card, or backup data by reading data from the flash card to the personal computer. See Figure 3-31.

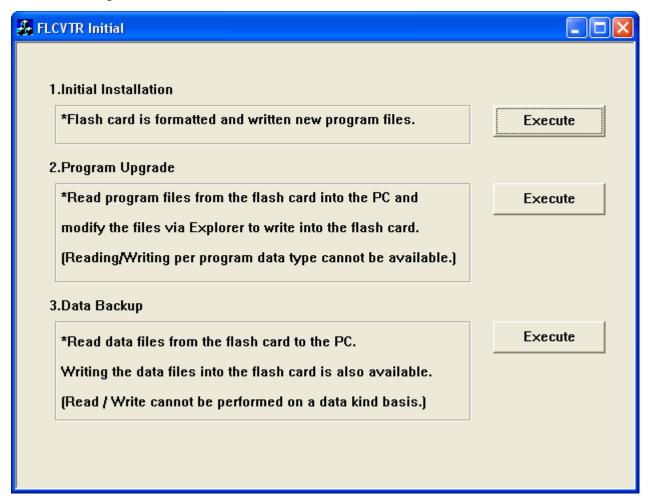
To launch the Flash Card Wizard, do the following:

Step From Microsoft Desktop, select Start > Programs > Installation Manager 24 > Flash Card Wizard.

OR

Step From the Installation Manager Menu Bar, click Tools > Flash Card Wizard ....

Figure 3-31 FLCVTR Initial





The flash card installation needs to be installed using the MPS System CD-ROM.

If the Initial Installation Execute button is clicked, Figure 3-32 displays.

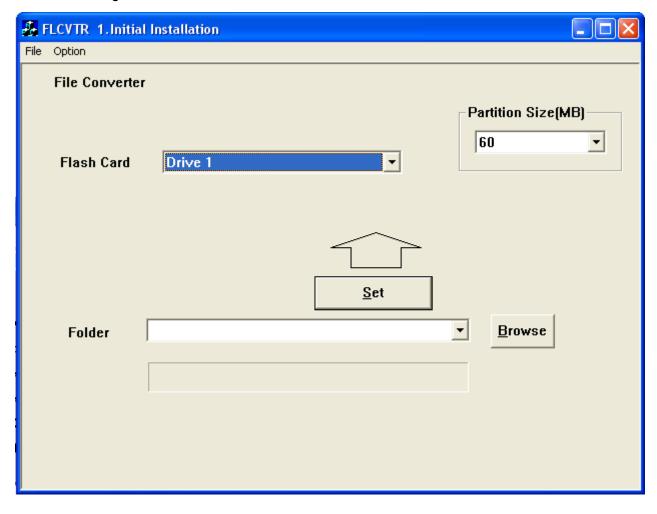


Figure 3-32 FLCVTR Initial Installation Execute

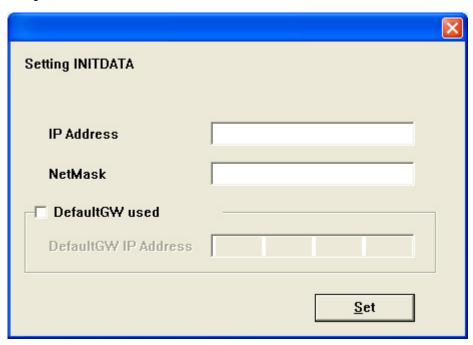
- Step 1 Insert an unformatted flash card into an available PCMCIA slot. Ensure you insert a flash card prior to launching the FLCVTR program in order to display the PC's PCMCIA slot for the Flash Card field.
- **Step 2** Click the **Browse** button to locate the file containing the program to be written to the flash card.



If defining the partition size is necessary, select the appropriate size from the pull-down menu located in the **Partition Size (MB)** field. Normally, the **Partition Size (MB)** field is not visible, choose the **Option** menu item and select the **PartitionSize Select** option to make the field visible.

- **Step 3** Select the PCMCIA slot for the flash card.
- **Step 4** Click the **Set** button to write the program to the flash card.
- **Step 5** After pressing the **Set** button, Figure 3-33 displays.

Figure 3-33 Setting INITDATA



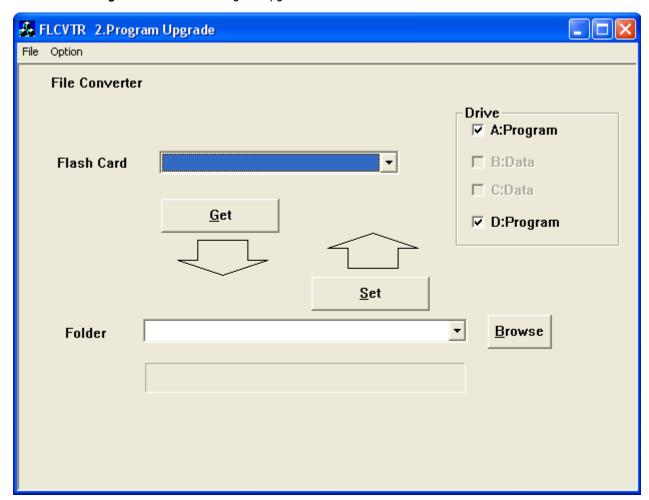
**Step 6** Enter the IP Address, Subnet Mask and Gateway of the SV7000, then click the **Set** button.



This option only applied to the SV7000, and is not available for a NEAX 2400 IPX.

 If the Program Upgrade Execute button is clicked, Figure 3-34 displays.

Figure 3-34 FLCVTR Program Upgrade Execute



- **Step 1** Insert the flash card containing the program files into an available PCMCIA slot.
- **Step 2** In the **Drive** field, choose the drive containing the program files and the location where the files are to be written.

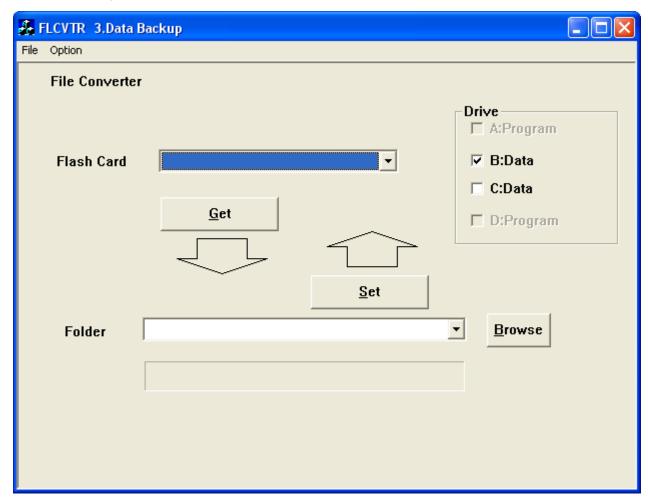


If the **Drive** field is not visible, choose the **Option** menu item and select the **Drive Select** option.

- Step 3 Select the PCMCIA slot for the flash card.
- Step 4 Click the **Browse** button to locate the folder or CD Drive where the Program Files are located.
- **Step 5** Click the **Set** button to load the Program Files to the Flash Card.

• If the Data Backup **Execute** button is clicked, Figure 3-35 displays.

Figure 3-35 FLCVTR Data Backup Execute



- **Step 1** Insert the flash card containing the program files into an available PCMCIA slot.
- **Step 2** In the **Drive** field, choose the drive containing the office data files and the location where the files are to be written.



If the **Drive** field is not visible, choose the **Option** menu item and select the **Drive Select** option.

- Step 3 Select the PCMCIA slot for the flash card.
- **Step 4** Click the **Browse** button to locate the folder where the office data files will be written.
- Step 5 Click the Get button to write the office data files located on the flash card to the location selected.

# Registration Wizard ...



The Registration Wizard screens that display for the UNIVERGE SV8500 system will be different from the screens shown in the following example.

The **Registration Wizard** connects your system to the NEC Registration Service and obtains your Activation Code. See Figure 3-36.

To launch the Registration Wizard, do the following:

Step From Microsoft Desktop, select Start > Programs > Installation Manager R25 > Registration Wizard.

OR

Step From the Installation Manager Menu Bar, click Tools > Registration

Wizard ....

Figure 3-36 Welcome to the Registration Wizard



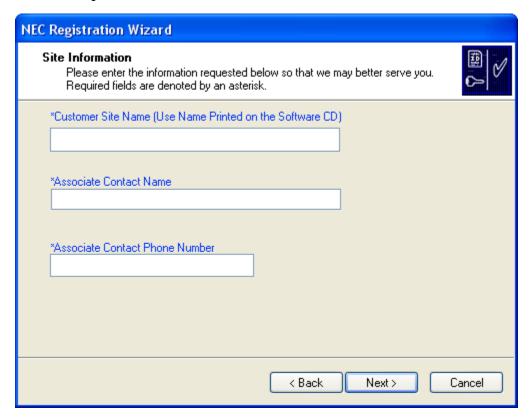
Step 1 Select the **Next** button to proceed. Figure 3-37 displays.

**NEC Registration Wizard** We want to know about you... The filling out of information required for registration of your NEC Solution is divided into three parts: Site Information Associate Information Accredited Technician Information This information will be used to provide you with quality and responsive service should the need ever arise. Mandatory information is denoted by an asterisk, other information is optional but can truly enhance the service that NEC can provide. If you do not have all of the necessary information, you will not be able to complete the registration process. To continue, click Next. < Back Next> Cancel

Figure 3-37 NEC Registration Wizard - We Want To Know About You

Step 2 Select the **Next** button to continue. Figure 3-38 displays.

Figure 3-38 NEC Registration Wizard - Site Information



- **Step 3** Enter the site information requested. Those fields denoted with an asterisk require an entry.
- Step 4 Click the **Next** button to continue. Figure 3-39 displays.

**NEC Registration Wizard** Complete your NEC Registration Thank you for completing the required information. You may now complete the registration process. You will need to be connected to a telephone line via a modem to continue. The Wizard will connect to the NEC Registration Service to register your information. During this connection, the NEC Registration Server will provide a System Activation License (PAL). Please shut down any other applications that may be using your modem at this time. To continue, click Next. < Back Next> Cancel

Figure 3-39 NEC Registration Wizard - Complete Your NEC Registration

Step 5 Click the **Next** button. Figure 3-40 displays.

**NEC Registration Wizard** Select System to Activate Select a System from the list below. Select a System from the List below. If you select a Default System, you will be prompted for connection details in the form of either a COM Port, IP Address or Modem Name COM1 Direct Connection to the System. COM Port 4800 BAUD Rate: IP Connection to the System. IP Address: Modem Connection to the System Dialing Number Modem Name BCM V.92 56K Modem Retrieve or Edit Connection Profile Save Connection Enter Profile Name Here < Back Next> Cancel

Figure 3-40 NEC Registration Wizard - Select System to Activate

- **Step 6** Select the appropriate system from the list provided.
  - —Direct Connection to the System. Enter the communication port and baud rate.
  - —IP Connection to the System. Enter the IP address.



The IP address entered here will determine the system information that will display when **Get System Information** is selected in Step 8.

- Modem Connection to the System. Select the modem type, enter the dialing number, and create, edit or retrieve a connection profile. Click the Save Connection button to save the modem profile.
- Step 7 Click the Next button. Figure 3-41 displays.



Figure 3-41 NEC Registration Wizard - Gather Security Codes from System - SV7000 Example

Step 8 Click **Get System Information** to connect your system and obtain/ update the hardware and software key codes, then click the **Next**. Figure 3-42 displays for all systems except UNIVERGE SV8500.

For UNIVERGE SV8500, when **Next** is clicked, the **Choose Options to Activate Your UNIVERGE SV8500** dialog displays providing options for obtaining/uploading the needed **SVI.zip** file or for proceeding directly to the UNIVERGE 8500 Activation Step.

- —If you do not already have a SVI.zip file, use the **Obtain SVI File** steps listed in Table 3-1 to retrieve the license file.
- —If you have a SVI.zip file and want to upload it to the UNIVERGE SV8500, use the **Upload SVI File** steps listed in the same table.
- —If you wish to skip the two options above and proceed directly to the UNIVERGE SV8500 Activation Step, use the **Activate** steps listed in the table.

 Table 3-1
 Options to Activate the UNIVERGE SV8500

	Obtain SVI File		Upload SVI File		Activate
Step 1.	Login to the License Management Server (LMS) and download the SVI.zip file. Load the SVI.zip file to the UNIVERGE SV8500.	·	Load the <b>SVI.zip</b> file to the UNIVERGE SV8500.  Obtain the Key Code File from the UNIVERGE SV8500.  Upload the Key Code File to the LMS and obtain the Activation Code from the LMS (either by web display or e-mail).  Register the Activation Code to the UNIVERGE SV8500.	·	Upload the Key Code File to the LMS and obtain the Activation Code from the LMS (either by web display or e-mail).  Register the Activation Code to the UNIVERGE SV8500.
Step 2.		Step 3.			
Step 3.	Obtain the Key Code File from the UNIVERGE SV8500.				
Step 4.	Upload the Key Code File to the LMS and obtain the Activation Code from the LMS (either by web display or e-mail).				
Step 5.	Register the Activation Code to the UNIVERGE SV8500.				

NEC Registration Wizard Register Information The wizard will now connect to the NEC Registration Service and obtain your Activation Code. Modem Configuration: Registration Server Dialing Number Modem Name Default: 1-214-262-4986 Connect to NEC Registration Server By Modem. By TCP-IP Ready Activation Code < Back Next> Cancel

Figure 3-42 NEC Registration Wizard - Registration Information

- Step 9 In the Modem Configuration Section, enter or select the correct information into the Modem Name and Registration Server Dialing Number fields.
- **Step 10** Click **Connect to NEC Registration Server** and obtain the Activation Code.
  - —The modem defined in Step 9 calls into the server and retrieves the Activation Code, or you can select the By TCP-IP option button to connect using that method.
  - —The activation code will display in **Activation Code** field after successful registration with the NEC Registration Service.
- Step 11 Select the Next button. Figure 3-43 displays.

Figure 3-43 NEC Registration Wizard - Activate Your System



Step 12 To activate your system, click the Next button. Figure 3-44 displays.

Figure 3-44 NEC Registration Wizard - System Activation



- Step 13 Select the Send Activation License button to activate your system.
- Step 14 Select the Next button to proceed. Figure 3-45 displays.



If the **Activation License** field is empty, you can either go back and connect to the NEC Registration Server or temporarily activate your system with the **Unlock** button.

NEC Registration Wizard Congratulations! NEC welcomes you to the ECP family. NEC is dedicated to providing "Communications without Compromise" and customer service beyond compare. We are here to empower you to provide innovative solutions to you customers. If you ever have any suggestions or concerns, do not hesitate to contact us. NEC is constantly enhancing our software, providing cutting edge applications and moving towards a truly Enterprise Open Network. Call us, Email Us, and Visit Us At: 1-800-TEAM-USA NEAX2400@necunified.com http://www.necunifiedsolutions.com View Log To exit this wizard, click Finish. < Back Finish Cancel

Figure 3-45 NEC Registration Wizard - Congratulations

Step 15 Click the Finish button to exit the Registration Wizard.

#### PCPro ...

The PCPro provides centralized online HTML-based programming access, allowing administrators to manage terminals, schedule maintenance and firmware updates, and remotely make moves, additions, or changes.

Experienced users who wish to use the PCPro to send commands directly to the switch can launch it from within Installation Manager.

To launch the PCPro, do the following:

- Step 1 Launch the Installation Manager. The Startup dialog displays.
- **Step 2** Select an existing project or create a new project. The Installation Manager main screen displays.
- **Step 3** Select **Tools** > **PCPro....** The PCPro launches and displays as a separate application.

## License Verification Tool ...



SV8500 does not support the License Verification Tool function.

The License Verification Tool provides a brief summary of the primary licenses that are available (and in use) on your SV7000 system.



This tool is for planning purposes only and should not be construed as any legal definition of the number of licenses that a customer has purchased or is entitled.

To launch the License Verification Tool, do the following:

Step From Microsoft Desktop, select Start > Programs > Installation Manager R25 > License Verification Tool.

OR

Step From the Installation Manager Menu Bar, click Tools > License

Verification Tool ....

## Clipboard...

Installation Manager now provides experienced users with integrated access to the MAT Clipboard application. You can use this tool to access MAT commands and transfer information directly to the Voice Server or work offline and upload all changes at once.

The Clipboard can save command data from the Voice Server as XML (Extensible Markup Language) files. You can then edit the XML files using Microsoft Excel and upload the modified data back to the Voice Server. Many MAT commands are time-consuming when programmed individually. Using the Clipboard to download and upload the command data in a single operation can make many tasks more efficient. For example:

- Create an off-line XML file containing a large number of new users, configured using the ASDT and AKYD commands, then upload the file to the Voice Server.
- Transfer data from an old Voice Server to a new Voice Server by downloading user data, editing it off-line, then uploading it to the new Voice Server.



For more complete information on using the Clipboard, refer to its user documentation.

The Clipboard application (Figure 3-46) speeds system installations and eliminates errors by importing data from one switch to a destination switch.

Clipboard has been enhanced to be able to perform batch downloads. You have the ability to:

- Download data from the switch based on categories (for example, Station Data, Trunk Data, Restricted Data, etc.)
- Add commands the data needs to be download to a list that would be run as a batch process.
- Save selected commands in user template files for future access.

This enhancement lessens the work needed when downloading data for the same set of commands.

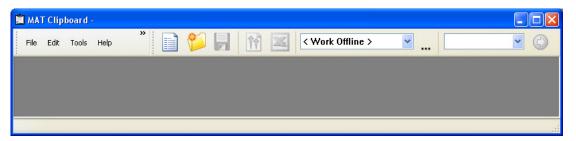
To launch Clipboard, do the following:

Step From Microsoft Desktop, select Start > Programs > Installation Manager R25 > Clipboard.

OR

**Step** From the Installation Manager Menu Bar, click **Tools** > **Clipboard**.

Figure 3-46 MAT Clipboard



## **Network Manager...**

The Network Manager is used to manage existing networks while using Installation Manager to install and manage new networks.

The Network Manager application is intended to enhance the capabilities already present within Installation Manager, but it does not require Installation Manager in order to perform its task. Network Manager can function in a stand-alone mode and has the capability of integrating nodes into the Fusion (FCCS) Network whether or not the connecting node was originally programmed using the MAT, the Installation Clipboard application, or Installation Manager.

Use of this software is normally conducted as follows:

- Step 1 Install NCN PBX using Installation Manager (optional).
- Step 2 Install LCN PBX using Installation Manager (optional).
- **Step 3** Create FCCS Network using Network Manager (**optional**).
- **Step 4** Insert LCN node into existing FCCS Network using Network Manager.

# Help Menu

The **Help** pull-down menu is the place to go for assistance or information.

## Help Index ...

The **Help Index...** option displays the HTML, context sensitive help for the MA4000 Installation Manager application.

## View Log File ...

The **View Log File...** option lists the current MA4000 Installation Manager log build information.

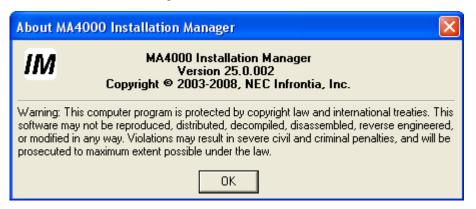
### View User's Guide ...

The **View User's Guide...** option displays this *MA4000 Installation Manager User Guide* as a PDF.

## About MA4000 Installation Manager ...

The **About MA4000 Installation Manager...** option displays the application's version and copyright information (Figure 3-47).

Figure 3-47 About MA4000 Installation Manager



# **Primary Sections**

The buttons located along the left side of the graphical user interface in the Main window (see Figure 3-48) contain the core functions of MA4000 Installation Manager. This is where you will view, manipulate, and prepare the data to be sent to the system.

Figure 3-48 Primary Sections Tabs



When a button is selected, a tab view appears for each running horizontally across the top (see Figure 4-2). This information is a logical break down of the main button selected on the left.

The following chapters will describe in detail every button and its purpose.

4

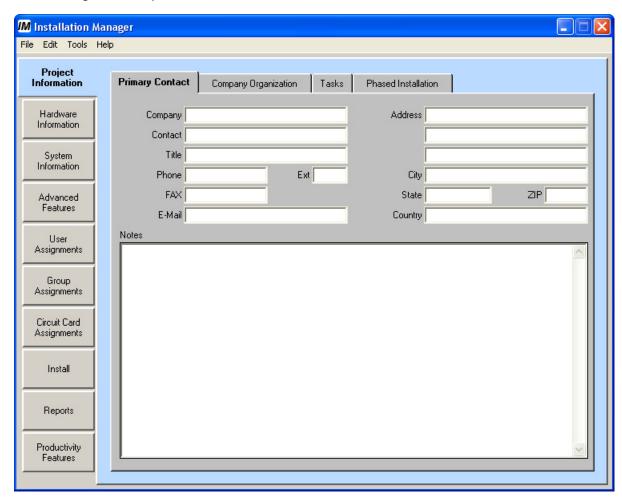
# **Project Information**

This chapter describes the MA4000 Installation Manager's **Project Information** section (Figure 4-1) tabs.

Chapter Topics

- Primary Contact Tab
- Company Organization Tab
- Tasks Tab
- Phased Installation Tab

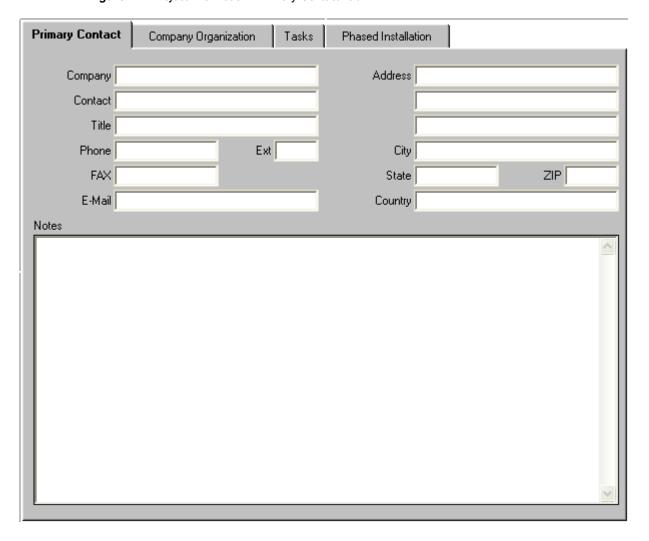
Figure 4-1 Project Information Tab



# **Primary Contact Tab**

The **Primary Contact** tab (Figure 4-2) is used to provide contact information for a single person who will be the central point of contact for the entire installation. Nothing on this tab will be transferred to the system. It is only provided to centralize the information for the installation.

Figure 4-2 Project Information - Primary Contact Tab



## **Company** field

Enter the primary contact's company name.

#### **Contact** field

This is the name of the individual who is the primary contact for the customer.

#### Title field

Enter the primary contact's title.

#### Phone field

Enter the primary contact's primary phone number.

#### Ext field

Enter the extension, if any, of the primary contact.

#### Fax field

Enter the facsimile phone number for the contact.

#### E-Mail field

Enter the contact's e-mail address.

#### Address field

Enter the primary contact person's address. There are 3 boxes available for entering the full address (i.e. street, P.O. Box, building number, mail stop, etc.)

#### City field

Enter the city where the contact is located.

#### State field

Enter the state where the contact is located.

#### Zip field

Enter the zip code for the contact's mailing address.

#### **Country** field

Enter the country where the contact is located.

#### Notes field

This is a free form text box allowing you to enter any information that maybe useful. You might want to enter a secondary contact, cell phone information, or other meaningful information. The field might also be a convenient spot to place notes concerning dates/times/outcomes of conversations.

# **Company Organization Tab**

The **Company Organization** tab (Figure 4-3) provides you with set fields allowing you to describe the company. This is usually information on the company where the system is being installed.

Company Organization Primary Contact Tasks Phased Installation Locations Building  $\nabla$ Edit New Delete Configure... Organization Group ∇ Edit New Delete Configure...

Figure 4-3 Project Information - Company Organization Tab

#### Locations section

The Location section displays a tree view of the information representing the placement of telephone stations. The tree view can be thought of as an address of sorts. To locate where someone lives, the country, state, zip, street, and street number must be known. In the same fashion, a telephone station must be easily located. This section provides the means to break the company down into various locations. Some thought should be given for the logical break down of the locations where telephone stations will be installed. This information might be different

for each installation. In Figure 4-3, the locations are broken down by Building then by Floor.



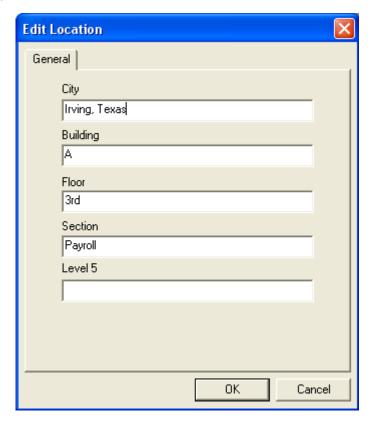
The maximum number of levels supported is five.

This information will be used in reports to help identifying locations for all telephone stations.

#### • Edit button

Before the **Edit** button can function, an entry in the Locations tree view must be selected. After selecting an entry, click the **Edit** button. Figure 4-4 displays. You must close this dialog before continuing with any other tasks.

Figure 4-4 Edit Location

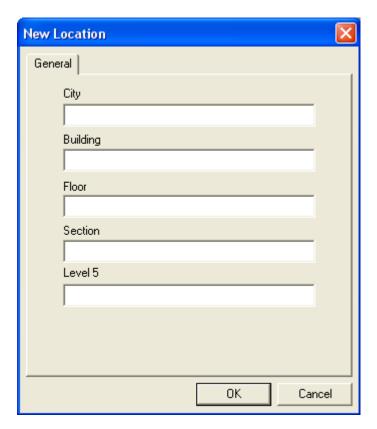


As shown, you are allowed to modify the entry selected.

#### • New button

The **New** button will allow you to define a new location. See Figure 4-5.

Figure 4-5 New Location



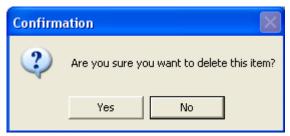
If the location already exists, you will receive an error message stating the location exists. You will be given the opportunity to make a change or cancel.

You have the option to add a new location and remain in the New Location Dialog. You simply click the  $\bf OK$  button and the new location is added.

#### • **Delete** button

To use the **Delete** button, you must first select a branch or a leaf element of the tree. Clicking the **Delete** button will display the *Confirmation - Delete This Item* (Figure 4-6). If the user clicks the **Yes** button, the node will be removed, and any of its children.

Figure 4-6 Confirmation - Delete This Item

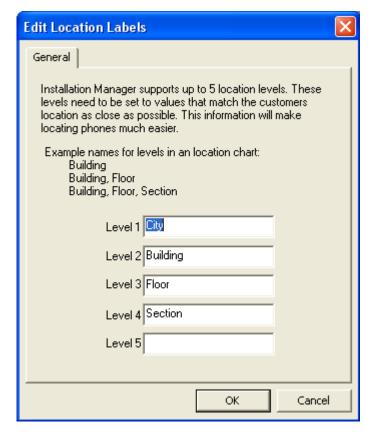


Selecting the **Yes** button will remove the element selected, and all components beneath it, but will not abort the operation.

#### • Configure button

The **Configure** button allows you to define the names of the levels within the customers organization. Figure 4-7 displays the dialog used to define the organization levels.

Figure 4-7 Edit Location Labels - General



## Organization section

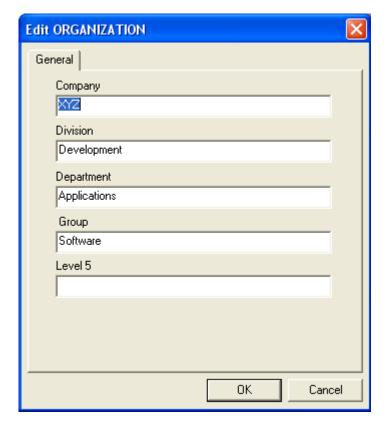
The Organization section allows you to define the company structure from an organization point of view. You can break the company down into departments, divisions, and groups. Its flexibility allows you to break items down in the best way possible.

The bottom half of Figure 4-3 displays a tree view of a defined organization. This tree view should closely follow the organization break down in a company.

#### • Edit button

To use the **Edit** button, you must select a node in the tree view. When **Edit** button is clicked, Figure 4-8 displays. You will be able to modify the name of that node.

Figure 4-8 Edit Organization - General



If you change the Division name to a new Division name, that will create another division.

#### • New button

The **New** button is used to create a new entry into the company organization. You can define a new Division using this dialog. See Figure 4-9.

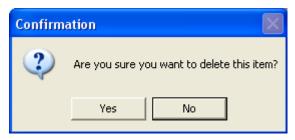
Figure 4-9 New Organization - General



#### • **Delete** button

You must select the element in the Organization tree view, then click the **Delete** button. Figure 4-10 displays.

Figure 4-10 Confirmation - Delete This Item

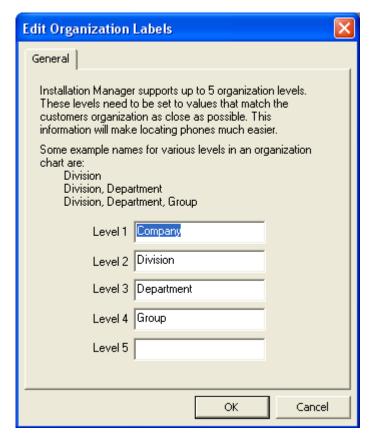


Selecting the **Yes** button will remove the element selected and all components beneath it, but will not abort the operation.

## • Configure button

The **Configure** button allows you to define the names of the locations within the customer's buildings. Figure 4-11 displays the fields used to define the organization levels.

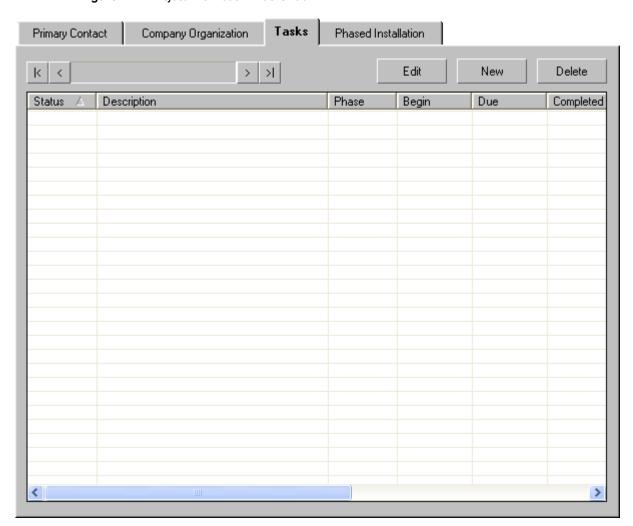
Figure 4-11 Edit Organization Labels - General



# Tasks Tab

The **Tasks** tab (Figure 4-12) allows you to create a task list to manage items that must be completed to have a successful installation. Each row in the list box represents a task.

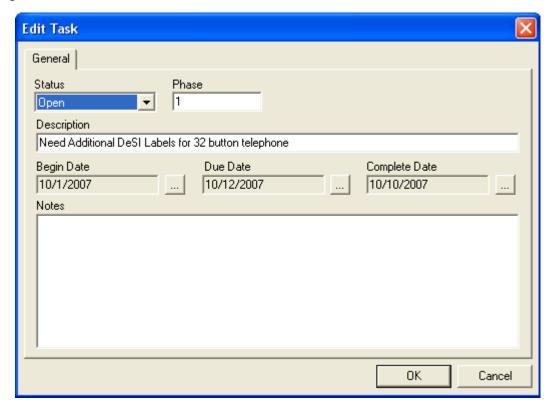
Figure 4-12 Project Information - Tasks Tab



#### • Edit button

In order to use the **Edit** button, a task must be selected. The **Edit** button will allow you to modify a task. Figure 4-13 displays a task being edited.

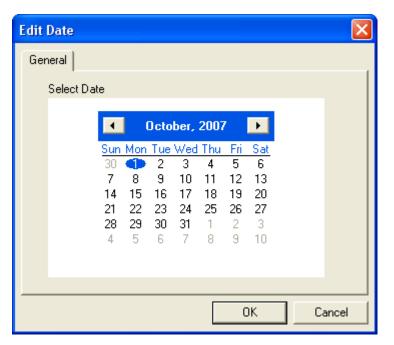
Figure 4-13 Edit Task





Selecting the **Browse** button for the **Begin Date**, **Due Date**, or **Complete Date** fields causes an Edit Date dialog box (Figure 4-14) to appear. Use this pop-up calendar to select the appropriate date for each field.

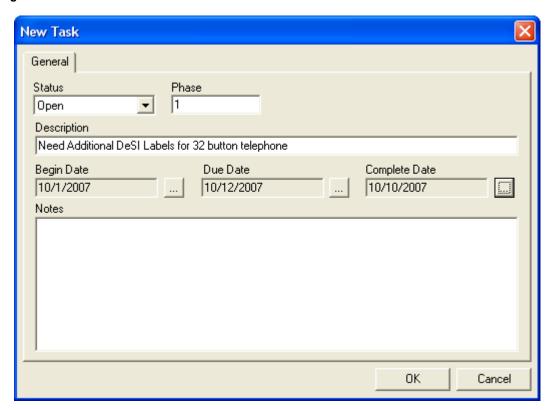
Figure 4-14 Edit Date - General



#### • New button

The **New** button will add the current information to the task list. Click the **New** button, and Figure 4-15 displays.

Figure 4-15 New Task - General

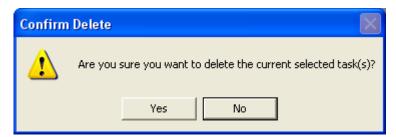


Once a task has been added, the status selected (**Open**, **Started**, **Testing**, or **Closed**), and the **Begin**, **Due**, and **Complete** dates chosen, click the **OK** button to return to the Tasks Tab.

#### • **Delete** button

The **Delete** button removes the current task from the task list. See Figure 4-16.

Figure 4-16 Confirm Delete - Delete The Current Selected Task(s)



# **Phased Installation Tab**



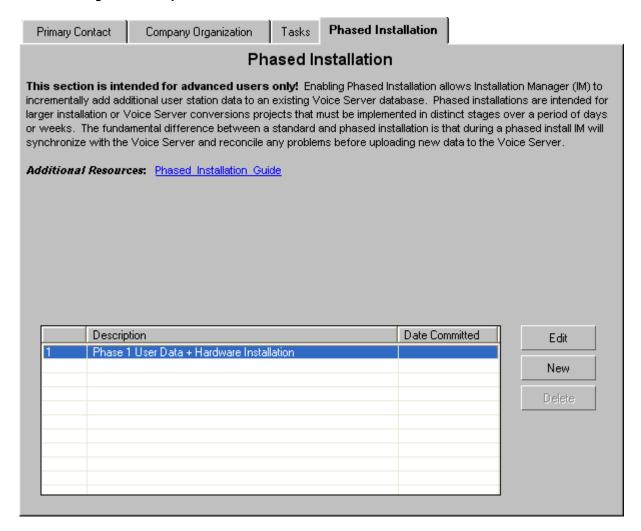
The Phased Installation tab is intended for advanced users only!

The **Phased Installation** tab (Figure 4-17) allows the Installation Manager (IM) to add additional user station data, MG devices, and Circuit Cards to an existing Voice Server database. The user can install the Voice Server data in different phases. The user and circuit card assignments can be assigned to different phases. The other basic data (access code, numbering plan, etc.) are for Phase 1 only.

Phased installations are intended for larger installations or Voice Server conversions projects that must be implemented in distinct stages over a period of days or weeks. Phased installation differs from a standard installation in the fact that during a phased installation Installation Manager will synchronize with the Voice Server and reconcile any problems before uploading new data to the Voice Server.

If you do not turn on the phase feature, all functions act as they did with the previous version of Installation Manager.

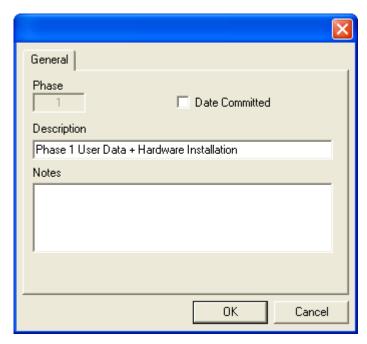
Figure 4-17 Project Information - Phased Installation Tab



#### • Edit or New button

When the **Edit** or **New** button is clicked, Figure 4-18 displays.

Figure 4-18 Phased Installation - New or Edit Button



- Enter the appropriate information, as needed, in the **Description** and **Notes** fields.
- After uploading the data, the corresponding phase will be marked as **Date Committed**. The check box can be cleared to resume the same phase data upload again.



Once a phase is uploaded, Installation Manager marks the phase as committed and enters the date that the phase was uploaded. Remember, this does not mean the phase data has been uploaded to the switch.

5

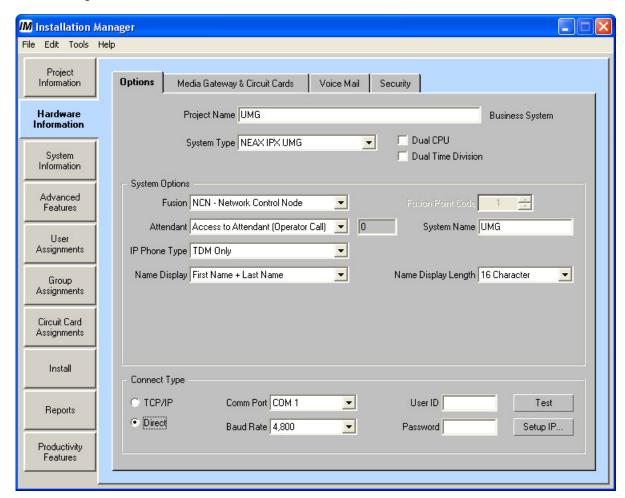
# **Hardware Information**

This chapter describes the MA4000 Installation Manager's **Hardware Information** section tabs (see Figure 5-1).

Chapter Topics

- Options Tab
- Media Gateway and Circuit Cards
- Voice Mail Tab
- Security Tab

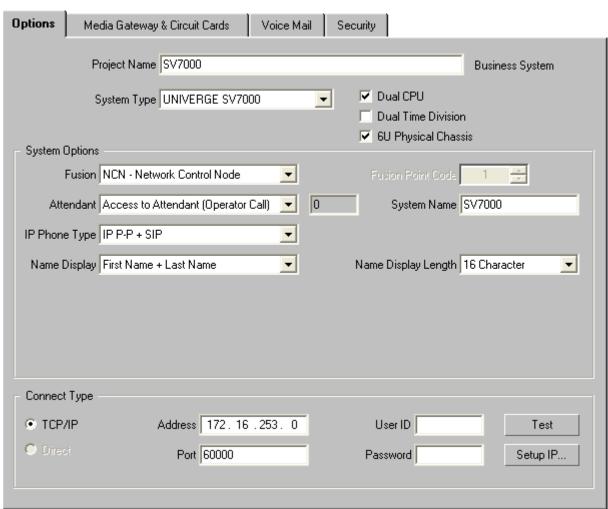
Figure 5-1 Hardware Information Tab



# **Options Tab**

Use Figure 5-2 (Options Tab) to configure miscellaneous system options.

Figure 5-2 Hardware Information - Options Tab



#### **Project Name** field

This is the name of the project database. You can change the database name, but is recommended it remain as the name of the database. This field is used in many reports to identify the installation the data is associated with.

#### System Type field

Valid choices are NEAX IPX, NEAX IPX DM, UNIVERGE IPX, UNIVERGE SV7000, NEAX IPX UMG, and UNIVERGE SV8500.

#### **Dual CPU** check box

Select to identify when redundant SV8500 and SV7000 T10 processors are used.

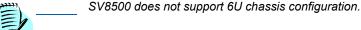
#### **Dual Time Division** check box

Select to identify when redundant SV7000 T10 processors are multiplexing.

#### 6 Unit (6U) Physical Chassis check box



- Checked Indicates 6U Physical Chassis's are to be used.
- · Unchecked Indicates 9U Physical Chassis's are to be used



#### System Options section

This section determines how the system will be programmed, and what commands will be used. It is used in reporting and consists of:

- **Fusion** Use the Fusion drop-down menu to specify the type of Fusion network to which your system will connect. The option is not available on SV7000 MPS. Select one of the following:
  - NCN Network Control Node (Fusion Network NCN)
  - LCN Local Control Node (Fusion Network LCN)
  - Standalone NEAX IPX/IPX DM or UNIVERGE IPX only
- Fusion Point Code (LCN Only)

If the system is to be an LCN in a Fusion Network, select an appropriate Fusion Point Code. It is useful to provide a technician this information so the system can be configured to support these features.

#### Attendant

- Access to Attendant (Operator Call) This is the number of the company's operator. This number will be referenced in several areas as a macro. It is used heavily in templates such as Call Forwarding.
- Use Monitored Number as Attendant

#### • System Name field

This is the name of the system. This information will be assigned internally to the system.



#### • IP Phone Type field

Allows specification of the IP Phone support needed in MA4000 Installation Manager. This setting determines what options are made available in other areas of MA4000 Installation Manager.

Example: If there is no IP Phone support needed, you will not have the option of viewing IP Phone Models in the Phone Model List on the User Edit Dialog.

The IP Phone Type options will consist of a combination of the following:

Requires a PIR. Time Division Multiplex phones are NEC non-IP, circuit card based Dterm or analog phones.

IP Peer-to-Peer phones are NEC IP phones not requiring circuit cards.

Session Initiated Protocol are NEC or other vendor IP phones which conform to SIP standards.

#### • Name Display and Name Display Length fields

Specify in the Name Display and Length fields the default format for users with phones having Name Display support.

#### **Connect Type** section

This section allows you to specify the communication interface used to connect to the system.

- TCP/IP option
  - Address IP address of the SV7000 T10 or IPX
  - Port 60000
- **Direct** option (requires serial cable and is not used for SV7000)
  - Comm Port Serial COM port of the PC which the MA4000 Installation Manager is operating on.
  - Baud Rate Default value is 4800

### **User ID** and **Password** fields (optional)

The **User ID** and **Password** fields can be used if authentication is required.



The following options can only be used after the software has been successfully installed and the system is online.

#### Test button

Clicking the **Test** button performs a verification of the system connection selected. If the test connection fails, Figure 5-3 displays.

Figure 5-3 Test Connection - Login Failed



#### Setup IP... button

Clicking the **Setup IP** ... button allows the user to configure the active and standby IP addresses, subnet mask, default gateway, speed, duplex mode, and the ARP broadcasting period (no send, 30 sec., 60 sec., or 120 sec.), if applicable. The user identification and backup IP passwords can also be activated. See Figure 5-4 (UNIVERGE SV8500 example), Figure 5-5 (UNIVERGE SV7000, UNIVERGE IPX, NEAX IPX, and NEAX IPX DM example), and Figure 5-5 (NEAX IPX UMG example).



If the **Backup IP/Password Settings** option is selected, Installation Manager will back up the SV7000 after configuring the IP address and password.

For the IPX, the **Backup IP/Password Setting** is not available. Instead, there is a **Total PIMs (Physical +Virtual)** field.

The IPX Installation Manager will automatically perform a System Backup and then reset the Voice Server, after the IP address and password are configured.

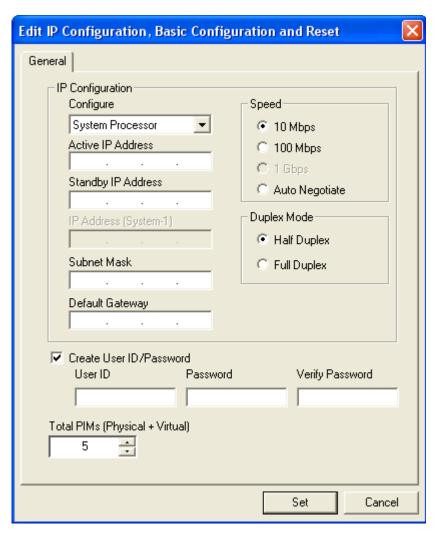
Edit IP Configuration, Basic Configuration and Reset General IP Configuration Configure Speed-Lan1 10 Mbps Active IP Address 100 Mbps 1 Gbps IP Address (System-0) Auto Negotiate Duplex Mode IP Address (System-1) Half Duplex Subnet Mask Full Duplex ARP Broadcasting Period Default Gateway No Send • ✓ Create User ID/Password User ID Verify Password Password ■ Backup IP/Password Settings Set Cancel

Figure 5-4 Edit IP Configuration - UNIVERGE SV8500 Example

Edit IP Configuration, Basic Configuration and Reset General IP Configuration Speed-10 Mbps Active IP Address 100 Mbps C 1 Gbps Standby IP Address Auto Negotiate Duplex Mode Half Duplex Subnet Mask Full Duplex Default Gateway ✓ Create User ID/Password Verify Password User ID Password ▼ Backup IP/Password Settings Set Cancel

Figure 5-5 Edit IP Configuration - UNIVERGE SV7000 and IPX, NEAX IPX, and NEAX IPX DM Example

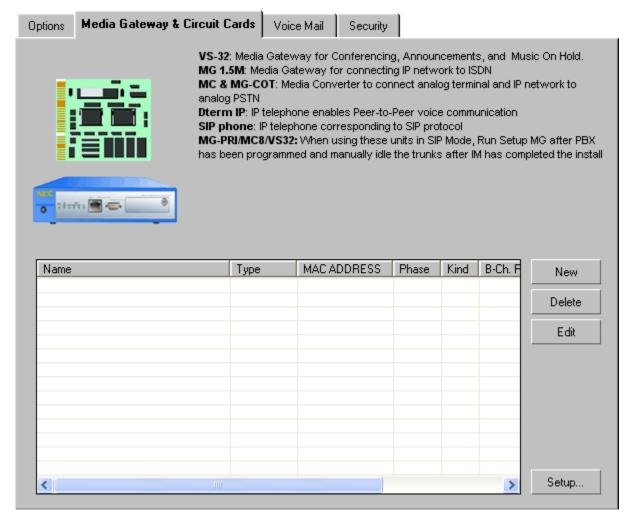
Figure 5-6 Edit IP Configuration - NEAX IPX UMG



# **Media Gateway and Circuit Cards**

The **Media Gateway and Circuit Cards** (Figure 5-7) tab is where peripheral devices (i.e, VS-32, MG-PRI, MG-COT, MC-2A), Protocol Handlers, and Circuit Cards are assigned and configured. By default, all of the required protocol handlers will be automatically assigned, no user configuration is required.

Figure 5-7 Hardware Information - Media Gateway and Circuit Cards Tab





The **Setup** button is disabled for the SV8500 SIP Server setup.

When installing a peripheral device, the MA4000 Installation Manager will both configure the SV7000 and separately the peripheral device. To configure a peripheral device, a serial cable is required to connect the MA4000 Installation Manager PC to the device.

Figure 5-8 Female DB9 to Female DB9 Straight Through Cable example



#### New button

Clicking the **New** button displays the **New Circuit Card** dialog depending on the IP server. See the Figure 5-9 and Figure 5-10 examples.

Figure 5-9 New Circuit Card - IPX Example

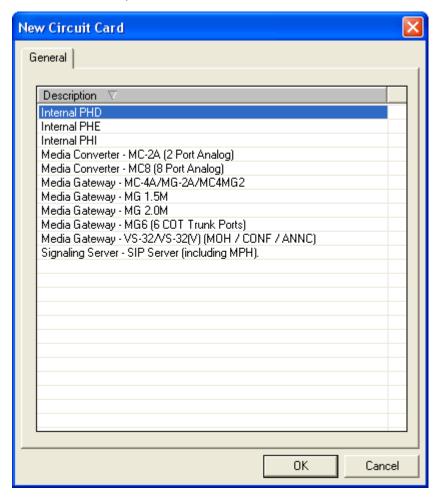


Figure 5-10 New Circuit Card - UNIVERGE SV8500 Example

Select the Media Gateway or circuit card to be assigned. Figure 5-11 is an example of the dialog box that displays when selecting the Media Gateway - MG 1.5M card.

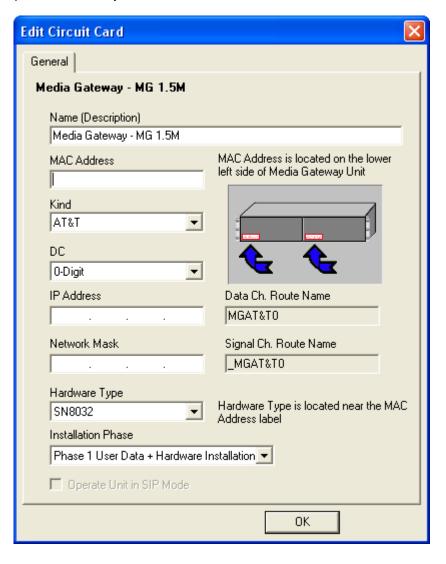


Figure 5-11 Example - Media Gateway - MG 1.5M Edit Circuit Card

Depending on the system type selected, some of the options will install automatically and will not need to be selected.

The following options require a PIR:

- Attendant Console
- PAD
- Physical
- Station
- Trunk

#### **Delete** button

Highlight the circuit card to be removed and click the **Delete** button.

#### **Edit** button

Edit the circuit card selected, changing the fields as needed. When you are satisfied with the changes made, click the **OK** button to save the changes.

## **Circuit Card Field Definitions**

**Access to Attendant Operator** The code system users dial to

reach the attendant.

**ANNC Equipment#** Specifies what the announcement

is to be used for. For Music On Hold, choose **64-MOH-IP Ext** 

**Hold Tone**.

**ANNC Pattern (ANP)** A .wav or .mdt-type file. Enter a

three digit number from 000 - 255. This number correlates to an existing .wav file loaded in the VS32, that you wish to be played for the defined ANNC Equipment

#.

**Connection Duration** Indicates how long a caller will

remain connected (**0** - Disconnect after 30 seconds; **1** - Remain connected until the caller

disconnects).

**Count** The number of the route that will

be created for this device

**DC** The number of digits to be

translated for incoming calls. Typically, this would be set for the number of digits in the station

numbers.

**Default Gateway Address** The IP address of your network's

gateway router.

**Do Not Send RingBack Tone** Selecting this option box prevents

sending a RBT.

**DRS Address** The IP address of the Device

Registration Server.

Hardware Type Media Gateway: MC4A/MG-2A/

MC4MG2/SCA-4LCOTA

MG 1.5M: SCA-24PRIA/SN8032/

SN8110

**IP Address** The Internet Protocol address for

the equipment.

**Installation Phase** The phase the device intends to

install.

**Kind** The PRI trunk type selected from

the pull-down menu (NI-2, AT&T - 41459, and DMS - Nortel

**A211**).

MAC Address The Media Access Control address

for the equipment. The address is located on the bottom of the

equipment.

Name (Description) Circuit card name.

**Network Mask** A string of 0's and 1's that mask

or screen out the network part of an IP address (IP) so that only the host computer part of the

address remains.

**Number of Attendants Consoles** The number of attendant consoles

the system contains.

Operate Unit in SIP Mode Initiates an interactive user

session that involves multimedia elements such as video, voice,

chat, etc.

**REGMAX** The registration assignment

capacity (1-6144). This maximum

should not exceed the line

capacity of the system. Default is

256.

**Repeat Pattern** Indicates the sequence of the

announcements the caller should

hear.

**Route Name** Note. This field can only be

modified if the Service Type is

ANNC.

**Route Restrictions (RSC)** The restriction classes in the

system.

Send Answer Signal Indicates whether Answer

Supervision should be sent when an incoming Trunk connects to an

Announcement.

Service Feature Restrictions (SFC)The service feature classes built

into the system.

**Service Type** How the channel is to be used.

**Signal Ch. Route Name** The Media Gateway circuit card's

signal channel route name.

**Station Number** The number of an available

station number conforming to the

numbering plan.

#### Media Gateway **Setup** button

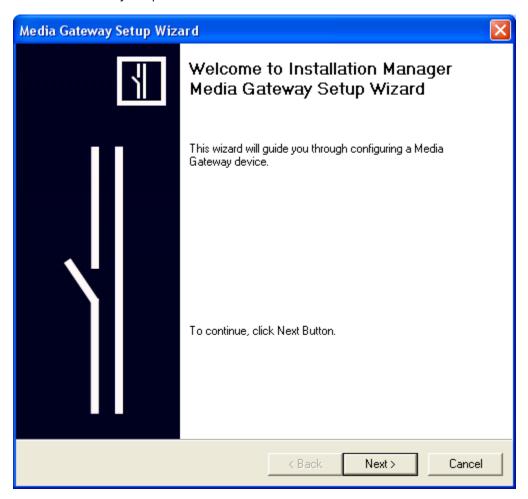


Before a Media Gateway device can be configured using the **Setup** button, a **One-time Password** needs to created. Please refer to the **Security Tab** section of this chapter to set the password.

#### • Setup button

**Step 1** Configure a Media Gateway device by highlighting a predefined Media Gateway and clicking the **Setup** button. Figure 5-12 displays.

Figure 5-12 Media Gateway Setup Wizard - Welcome



Step 2 Click the Next button to proceed. Figure 5-13 displays.

Media Gateway Setup Wizard Select Operation Select the operation you would like to perform. Comm Port MG Setup Script COM 1 • MG\_DHCP\_DUPLEX\_INT\_TP.txt Properties: Enable DHCP Default Gateway Address Speed: Duplex Mode 10 Mbps Half Duplex 100Mbps Full Duplex Auto SCA-24PRIA - Console cable connection located on front of unit (RJ45) MG-24PRIA - Console cable connection located on front of unit (RJ45) SN8032 - Console cable connection located on back of unit (RS232). SN8110 - Console cable connection located on front of unit (RJ45). < Back Next > Cancel

Figure 5-13 Media Gateway Setup Wizard - Select Operation

Step 3 Select the appropriate Comm Port, Properties, Speed, and Duplex Mode, you wish the operation to perform, enter the Default Gateway, if applicable, and then click the Next button. Figure 5-14 displays.

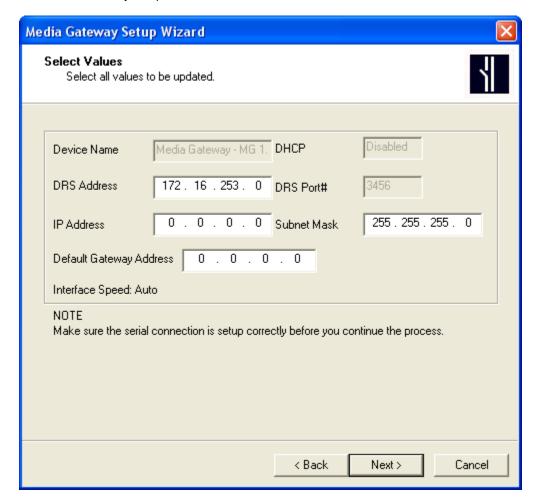


The option buttons located beneath the **Speed** and **Duplex Mode** sections display the current selection of Media Gateway hardware type. They are:

- Media Gateway MG 1.5M
- Media Gateway MC-4A/MG-2A/MC4MMG2/SCA-4ICOTA

**Example**: SCA-24PRIA, SN8110, and SN8032 all belong to the MG 1.5M hardware family. Each has a different capacity or firmware.

Figure 5-14 Media Gateway Setup Wizard - Select Values



- Step 4 Update the values before continuing.
- **Step 5** Connect a serial cable from the COM port on the PC to the RS232C connector on the Media Gateway unit.
- **Step 6** When all the values are updated and correct, click the **Next** button. Figure 5-15 displays.

Figure 5-15 Media Gateway Setup Wizard - Setting Media Gateway



**Step 7** When the Media Gateway setup is complete, Figure 5-16 displays.

Completing the Media Gateway Setup Wizard

Congratulations. You have Completed the Media Gateway Setup Wizard. The results of this operation are shown below.

Operation Completed.

View Log...

View Log...

Cancel

Figure 5-16 Media Gateway Setup Wizard - Operation Completed

- **Step 8** Click the **View Log** button to see a list of the operation results.
- **Step 9** Click the **Finish** button to exit the Media Gateway Setup Wizard.

# **Signaling Server - SIP Server (Including MPH)**



The Signaling Server is enabled when:

- System Type = **SV7000 UNIVERGE**
- Fusion = NCN Network Control Node



UNIVERGE SV8500 is not supported.

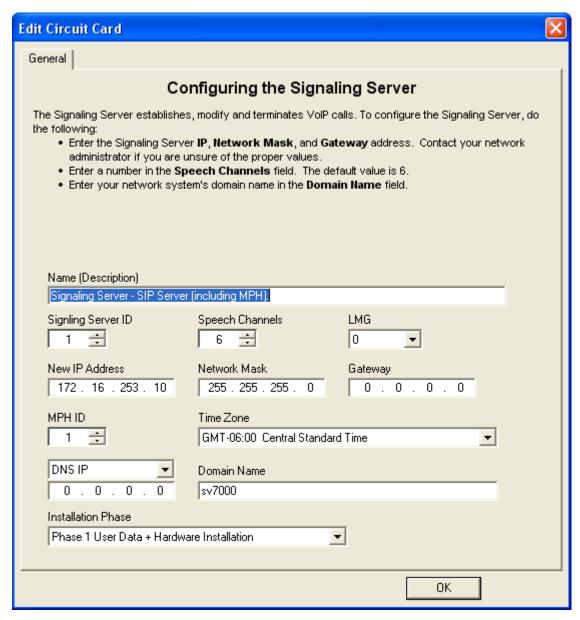
The **Signaling Server** option (Figure 5-17) allows you to define ranges for the SIP Server. The signaling server helps establish, modify and

terminate IP-base calls. You can use Installation Manager to set basic signaling server communication parameters.



Information entered in the fields on the **Signaling Mail** tab are for Phase 1 installations only.

Figure 5-17 Hardware Information - Signaling Server Tab





For the UNIVERE SV8500, the **LMG**, **Time Zone**, and **DNS IP Address** fields do not display.

# Name (Description) field

Enter a server description, or use the default shown.

**Signaling Server ID** field (This name must be unique on the NEAX IPX UMG)

Enter the Signaling Server's ID, or use the default value of **1**.

# Speech Channels field

Enter the appropriate number of channels, or use the default value of **0**.

**LMG** field (UMG System Only)

Enter the Local Module Group total (0 - 3).

# New IP Address field

Enter the Signaling server's new IP address.

#### Network Mask field

Enter the Subnet Mask for the Signaling Server's IP Address.

# Gateway field

Provide the Gateway's address for routing.

**MPH ID** field (This name must be unique on the NEAX IPX UMG)

Enter the Multi Protocol - MPH ID, or use the default value of 1.

# Time Zone field

Select the applicable time zone.

#### **DNS** field

Enter the DNS Data (Signaling Server) address or name. If using the address format, enter the Signaling Server's IP Address (same as the 'New' IP Address field).

**Domain Name** field (This name must be unique on the NEAX IPX UMG)

Supply the network system's domain name for the Signaling server, or use the default **UNIVERGE\_SV\_7000.COM**.

# Installation Phase field

Specify the phase in which the signaling server data will be uploaded to the server. (Phased installations only).

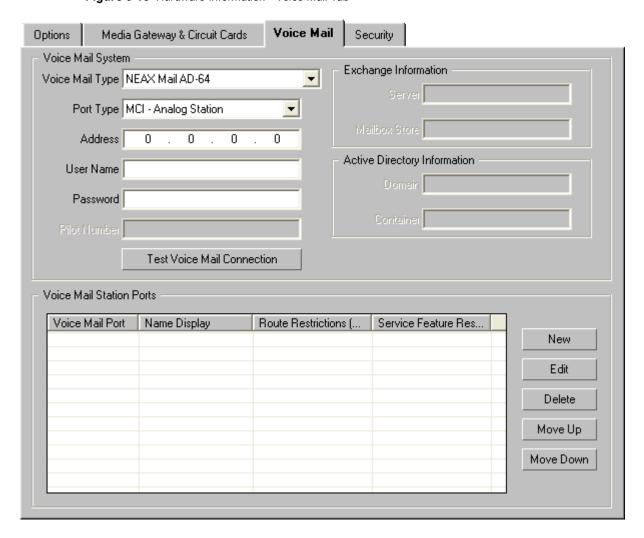
# Voice Mail Tab

The **Voice Mail** tab (Figure 5-18) allows you to set and configure information used to link a user to a voice mail system. The **Voice Mail** tab will provide information to the MA4000 Installation Manager on how it can connect to the voice mail system. Any detailed customizing will require a technician to use existing maintenance interfaces to completely set up the voice mail system.



Information entered in the fields on the **Voice Mail** tab are for Phase 1 installations only.

Figure 5-18 Hardware Information - Voice Mail Tab



# **Voice Mail System**

# Voice Mail Type field

The available options are <None>, NEAXMail AD-64, UNIVERGE UM4730, UM 8500 SQL Message Store, UM8500 Exchange Message Store, and <Other Voice Mail>.

# **Port Type**

	NEAXMail AD-64	UNIVERGE UM4730	UM8500 Exchange Message Store	UM8500 SQL Message Store	Other Voice Mail
MCI - Analog Station	Х		Х	Х	Х
MCI - Line Side T1	Х		Х	Х	Х
Digital Integration (Dterm Ports)	Х		Х	Х	Х
Digital IP Integration		Х	Х	Х	

#### Address field

Specifies the IP Address of the voice mail system for administration.

#### User Name field

This is the administrator user name configured on the voice mail system.

# Password field

This is the administrator's password on the voice mail system.

# Pilot Number field

This is the pilot number of the hunt group for the voice mail system. This will be used for the voice mail macros in Key Button templates, {VoiceMail}. This field is determined by the first entry listed in the **Voice Mail Station Ports** field.

#### Test Voice Mail Connection button

Clicking the **Test** button performs a verification of the Voice Mail System connection.



The **Test** button can only be used by the UNIVERGE UM4730 after all Voice Mail Ports have been programmed and the UNIVERGE UM4730 is on-line.

# **Exchange Information**

#### Server field

This is the Microsoft Exchange server name. Example: Mailbox Store.

#### **Mailbox Store**

The Mailbox Store (similar to group) where the mailboxes were created. Example: First Storage Group.

# **Active Directory Information**

#### Domain

The active directory domain name. Example: cantonad120.com.

#### Container

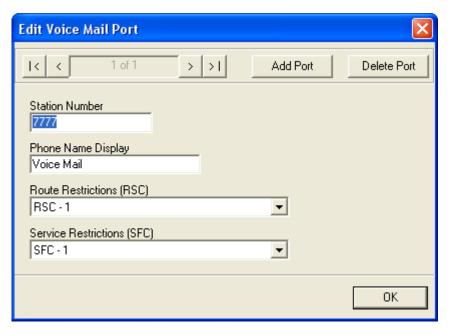
The container name where users are added. Example: Users.

# **Voice Mail Station Ports**

# **New** button

When the **New** button is clicked, Figure 5-19 displays.

Figure 5-19 Edit Voice Mail Port



Enter the applicable station number and the phone name to be displayed. Select the Route Restrictions and Service Restrictions (use the default, or create a new configuration) from the **Route Restrictions (RSC)** and **Service Restrictions (SFC)** drop-down menu. A port can also be removed by clicking the **Delete Port** button.

#### **Edit** button

Select the port to be edited and click the **Edit** button. A display similar to Figure 5-19, containing the information for the selected port, appears.

#### **Delete** button

To delete a specific port, select the port and click the **Delete** button. Click the OK button to verify deletion of the port.

# Move Up and Move Down buttons

Use the **Move Up** or **Move Down** buttons to arrange the sequence of each port.

# **Security Tab**

The **Security** tab (Figure 5-20) allows you to set and configure a one-time password that will prevent unauthorized access to the SIP terminal/equipment.



The following equipment are compatible with the one-time password authentication:

- Media Converter MC\* (8 Port Analog)
- Media Gateway PRI (SP-3884, Issue-5A or later)
- DtermIP(SIP) (1.4.3.0 or later)
- VS32-V (SP-3901)



Information entered in the fields on the **Security** tab are for Phase 1 installations only.

Figure 5-20 Hardware Information - Security Tab

Security Media Gateway & Circuit Cards Voice Mail Options: Terminal/Equipment Security This feature prevents unauthorized access to your SIP terminals/equipment through the use of a one-time password. Because the one-time password is a disposable password that can be used only one time, using the password makes it difficult for unauthorized person to sneak into the network. The one-time password becomes invalid when the available time period has been reached. If the system is initialized or the effective timer has expired, the password needs to be reassigned. Passwords must be 4 to 10 digits 0 - 9, \*, or #. The following equipment are compatible with the one-time password authentication: Media Converter - MC8 (8 Port Analog) Media Gateway - PRI (SP-3884, Issue-5A or later) DtermIP(SIP) (1.4.3.0 or later) VS32-V (SP-3901) One-Time Password Terminal Encryption | Partial Da Terminal Authentication Dis-

# **Terminal/Equipment Security**

# One-Time Password field

The one-time password is a disposable password that can be used only one time. The password becomes invalid when the time period indicated in the **One-Time Password Expires** field is exceeded. If the system is initialized or the effective timer expired, the password will need to be reassigned. Passwords must be 4 to 10 digits in length, consisting of the characters 0 through 9, the \* sign, or the # sign.

# **Expires** field

The options available are Never, 1 hour, 8 hours, 24 hours, 2 days, 3 days, 4 days, 5 days, 6 days, or 7 days.

# Terminal Encryption field

The options available are Partial Data Encryption or Full Data Encryption.

#### Terminal Authentication field

The options available are Disabled or Enabled.

6

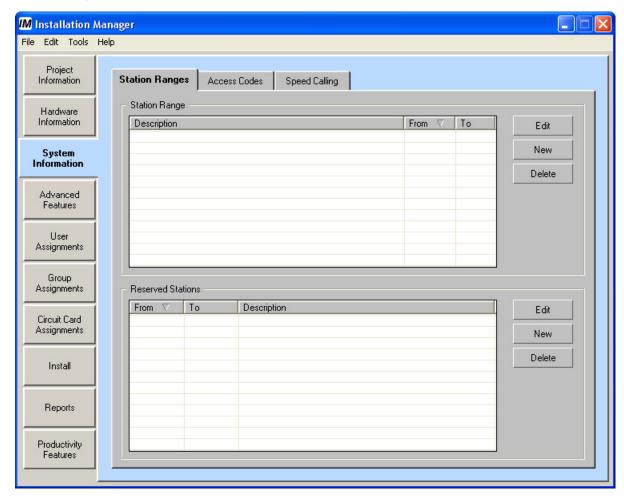
# **System Information**

This chapter describes the MA4000 Installation Manager's **System Information** section tabs (see Figure 6-1).

Chapter Topics

- Station Ranges Tab
- Access Codes Tab
- Speed Calling Tab

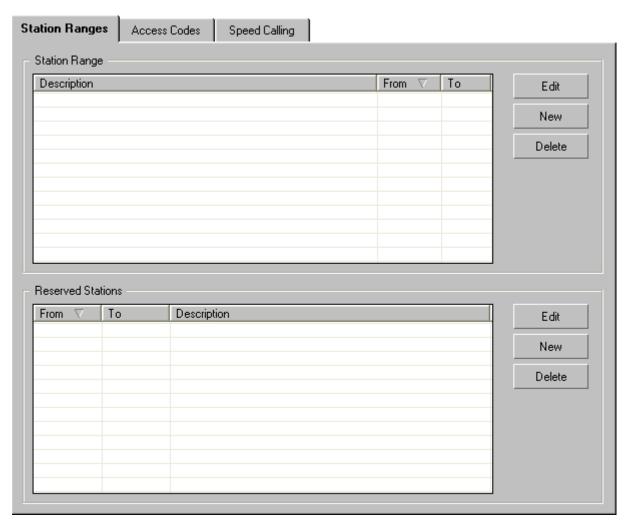
Figure 6-1 System Information Tab



# Station Ranges Tab

The **Station Ranges** tab (Figure 6-2) allows you to define ranges for various types of phone extensions and to also reserve numbers so the tool will not automatically be assigned to those ranges.

Figure 6-2 System Information - Station Ranges Tab



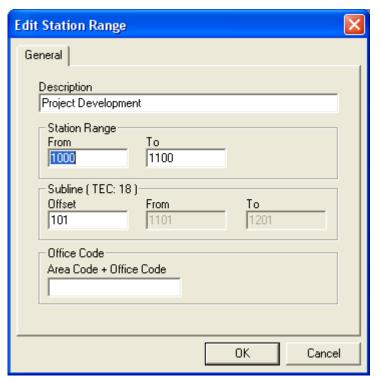
# Station Range section

The Station Range section lists all the station ranges that have been defined.

#### • Edit button

You must first select a record in the Station Range list, then click the **Edit** button. Figure 6-3 displays allowing you to modify the entry selected.

Figure 6-3 Edit Station Range - General



# **Description** field

The **Description** field is any description you want to use to identify the Station Range. It is used for informational purposes when assigning users. On the basis of ranges assigned here, and applied in the user assignment dialog, the MA4000 Installation Manager will automatically assign an unused station number from the appropriate range.

## Station Range section

The **Station Range** fields contain the defined range.

# Subline section

The **Subline** is used to assign an offset value, a group of numbers that will be allocated for use as sublines. The offset value can be a negative value.

# Office Code section

The **Area / Office Code** field allows you to specify the Telco information associated with the range of station numbers.

Select the **OK** button to accept the changes, or the **Cancel** button to ignore the modifications specified.

#### New button

The Station Range **New** button allows you to define a new Station Range. See "Edit button" on page 6-3 for a complete explanation of all the fields available.

#### • Delete button

You must first select a row in the **Station Range** list, then click the **Delete** button to remove the record. Figure 6-4 displays asking you whether or not you want to delete the selection.

Figure 6-4 Warning - Delete Station Range(s)



## Reserved Stations section

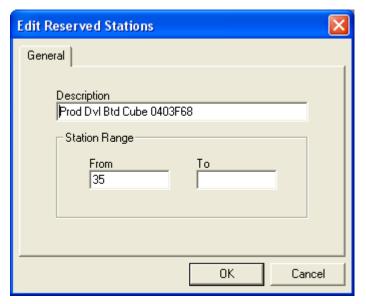
The Reserve Stations section allows you to instruct the MA4000 Installation Manager not to automatically assign users to specific numbers or sets of numbers. A good example would be for voice mail systems and operators. Extensions to these items are generally manually assigned to maintain commonality with a previous system, or to make the extensions easy to remember.

Later in the **Users** section, there is the ability to manually assign a user to a specific extension. The user's name will be inserted into the Reserve Station list, removing the number from the pool of extensions available for automatic assignments.

## • Edit button

You must first select a row then click the **Edit** button. Figure 6-5 displays providing you the ability to edit the selected record.

Figure 6-5 Edit Reserved Stations - General



# **Description** field

Enter a meaningful description of the range being defined.

# Station Range section

Enter the range of extensions to be reserved. If it is a single number, then set the **From** and **To** fields to the single number. The **From** number must be less than the **To** number.

Select the **OK** button to accept the changes, or the **Cancel** button to ignore the modifications specified.

# • New button

The Reserved Station Range **New** button allows you to define a new Reserved Station Range. See "New button" on page 6-5 for a complete explanation of all the fields available.

### • Delete button

You must select a row in the list, then click the **Delete** button. Figure 6-6 displays asking you whether or not you want to delete the selection.

Figure 6-6 Warning - Delete Reserved Station Range(s)



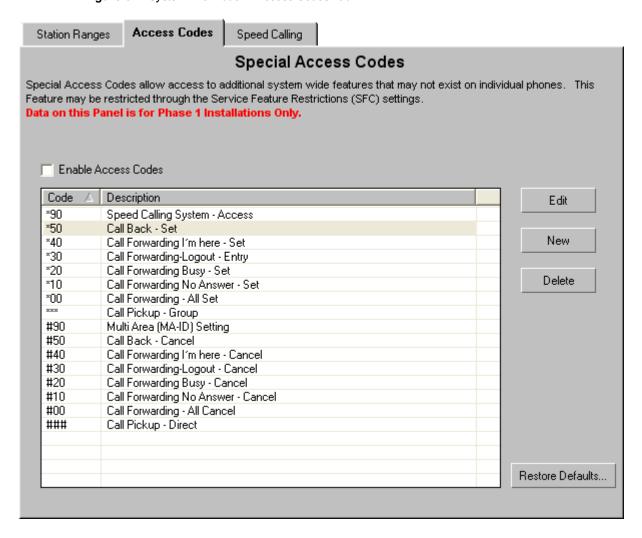
# **Access Codes Tab**

Special Access Codes allow access to additional system-wide features that may not exist on individual telephones. This feature may be restricted using the Service Feature Restrictions (SFC) settings. See Figure 6-7.



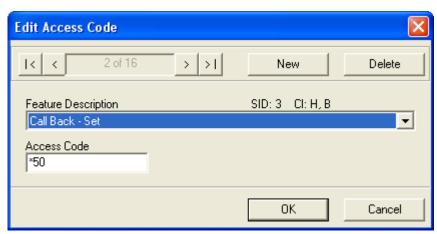
Information entered in the fields on the **Access Codes** tab are for Phase 1 installations only.

Figure 6-7 System Information - Access Codes Tab



When the **Edit** or **New** buttons are selected, Figure 6-8 displays.

Figure 6-8 Edit Access Code



- Step 1 Select the desired feature for the new or edited access code from the Feature Description drop-down field.
- Step 2 Enter the code to be used for this feature in the Access Code field.
- Step 3 If editing an existing feature, click the **OK** button to accept the changes. If this is a newly defined feature, click the **New** button to create the feature.
- **Step 4** You can remove a feature either by selecting it from the **Access Codes** tab, or the Edit Access Code window, and clicking the **Delete** button.

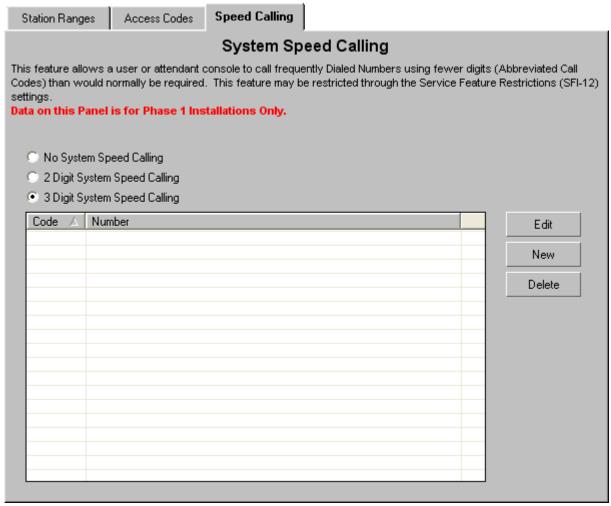
# **Speed Calling Tab**

The Speed Calling feature allows a user or attendant console to call frequently dialed numbers using fewer digits (Abbreviated Call Codes) than normally required. This feature may be restricted using the Service Feature Restrictions (SFI-12) settings. See Figure 6-9.



Information entered in the fields on the **Speed Calling** tab are for Phase 1 installations only.

Figure 6-9 System Information - Speed Calling Tab



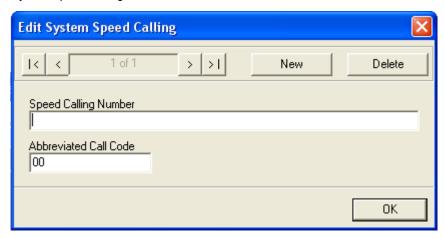
The options available are **No System Speed Calling**, **2 Digit System Speed Calling**, and **3 Digit System Speed Calling**.

When the **Edit** or **New** buttons are selected, Figure 6-10 displays.



To be able to access System Speed Calling, a System Speed Calling key must be assigned to the Dterms, or a System Speed Calling Access Code must be assigned.

Figure 6-10 Edit System Speed Calling



- Step 1 Enter the desired number in the Speed Calling Number field (a maximum of 24 digits).
- Step 2 Enter the code to be used for this feature in the Abbreviated Call Code field.
- **Step 3** If editing an existing feature, click the **OK** button to accept the changes. If this is a newly defined feature, click the **New** button to create the feature.
- Step 4 You can remove a feature either by selecting it from the Speed Call tab, or the Edit System Speed Calling window, and clicking the Delete button.

7

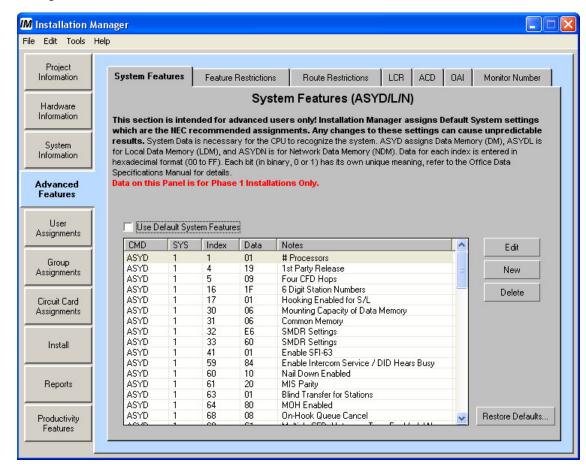
# **Advanced Features**

This chapter describes the MA4000 Installation Manager's **Advanced Features** section tabs (see Figure 7-1).

Chapter Topics

- System Features (ASYD) Tab
- Feature Restrictions Tab
- Route Restrictions Tab
- Least Cost Routing (LCR) Tab
- Automated Call Distribution (ACD) Tab
- Open Application Interface (OAI) Tab
- Monitor Number Tab

Figure 7-1 Advanced Features Tab



# System Features (ASYD) Tab

The System Features (ASYD) tab (Figure 7-2) defines the ranges of station numbers the Installation Manager will use to assign phone numbers to users. Also, the feature allows administrators to designate a range or numbers that will not be assigned to users.

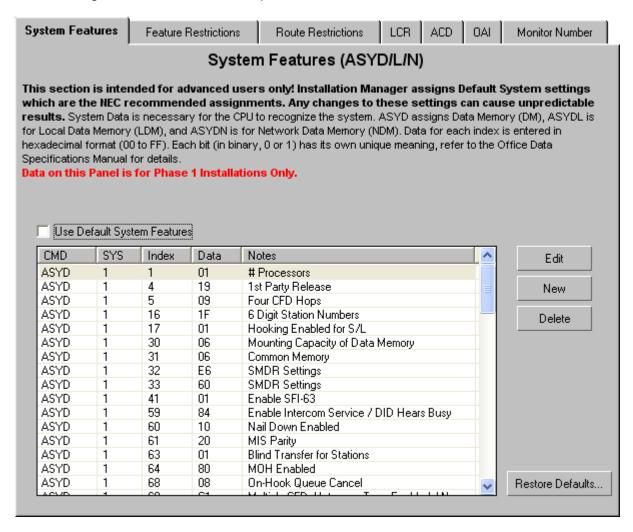


Information entered in the fields on the **System Features (ASYD)** tab are for Phase 1 installations only.



This tab is intended for advanced users only.

Figure 7-2 Advanced Features - System Features Tab



Your system, in its initial state, contains no configuration information and must be loaded with data which lets the CPU recognize the system type and configuration. The ASYD commands assign values for data

memory (DM), local data memory (LDM), and network data memory (NDM) (see Figure 7-3). By default, Installation Manager supplies initial values for these necessary parameters and uploads them to the CPU during the installation process.

Experienced users can alter these values, as well as delete or create new commands. Be aware that deleting required values may cause your system to be non-functional. For complete information on using ASYD commands to configure Voice Server features, consult the Office Data Specifications Manual.

Data for each index is entered in hexadecimal format (00 to FF).

Example: Data = 19. Bit 0, 3, and 4 are set.

### Example:

Each bit (in binary, 0 to 1) has its own unique meaning. Refer to the *Office Data Specifications Manual* for details.

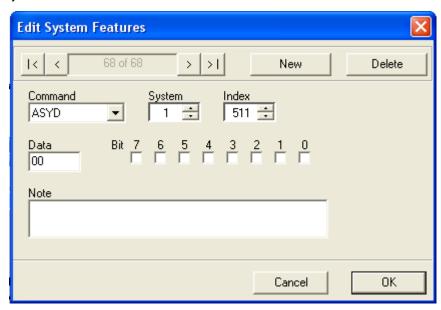
To use the default features, select the **Use Default System Features** check box. Restore the default settings by clicking the **Restore Defaults** button.

When the **Edit** or **New** buttons are selected, Figure 7-3 displays.



These buttons are only enabled when the **Use Default System Features** option is not selected.

Figure 7-3 Edit System Features



Step 1 Select the desired command (ASYD, ASYDL, and ASYDN) from the Command drop-down field.

- Step 2 Enter the appropriate information to the System, Index, Data, Bit, and Note fields. The information contained in the Data field is in hexidecimal format.
- **Step 3** If editing an existing feature, click the **OK** button to accept the changes. If this is a newly defined feature, click the **New** button to create the feature.
- Step 4 You can remove a feature either by selecting it from the Systems Features (ASYD) tab, or the Edit System Features window, and clicking the Delete button.



Deleting a selecting System Feature record does not disable the selected feature, but, instead, restores the original System Default settings.

To disable a feature refer to the Office Data Specification Manual.

**Step 5** Use the **Cancel** button to return to the **Systems Features (ASYD)** tab without making any editing changes.

# **Feature Restrictions Tab**



Information entered in the fields on the **Feature Restrictions (ASYD)** tab are for Phase 1 installations only.

The **Feature Restrictions** tab (see Figure 7-4) allows you to provide meaningful names to the Service Feature Classes built into the system. It is anticipated that as installation personnel use MA4000 Installation Manager, they will develop default templates that are used for the majority of their customers and end users. This feature defines and selects system-wide features and, optionally, allows you to enable or disable them using day/night modes.

There are 16 Route Restriction Classes (RSC) and 16 Service Feature Classes (SFC) available on your system. You can use Route Restriction Classes to prevent, for example, lobby phones from making outgoing calls. You can use Service Feature Classes to assign a group of phones a Class of Service feature, such as providing call forwarding for all guest phones.

Your system, by default, lists each restriction class with a numeric code, such as RSC-0. Installation Manager lets you create meaningful text descriptions for each level, such as "Guest Phone RSC-0", making it easier to administer and maintain restriction classes.

You can use the Restrictions tab to enable or disable individual classes, and to specify whether they apply to Day or Night service, or both. You can also specify whether route restrictions should apply to incoming/outgoing attendant or direct-dialed calls.

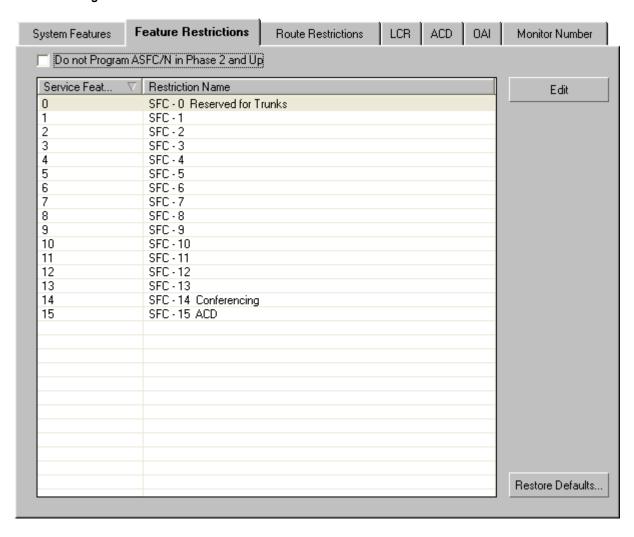


Figure 7-4 Advanced Features - Feature Restrictions Tab

# • Edit button

When you select a Service Feature Class, then click the **Edit** button, Figure 7-5 initially displays.

Edit Service Feature Restrictions (SFC) Day Night SFC Number Description SFC - 1 Use Default Service Features ☑ 1: Outgoing Trunk Queuing 2: Call Back 3: Executive Right-of-Way (Calling) ☑ 4: Executive Right-of-Way (Called) ▼ 5: Call Waiting - Originating (Calling) 6: Call Waiting - Originating (Called). 7: Call Forwarding - All Calls 8: Call Forwarding - Don't Answer 9: Call Forwarding - Busy Line ▼ 10: Call Hold ☑ 11: Data Line Privacy/Attendant Camp On (0 = Privacy / 1 = Camp On) ▼ 12: Speed Calling System 23: Voice Mail Password Display Elimination 29: Direct Call Pickup ☑ 44: Last Number Call Redial 52: Voice Call using an Access Code ▼ 53: Message Reminder using an Access Code ✓ 67: Call Park-Access and Answer Only Show Selected Features Clear All 0K Cancel

Figure 7-5 Edit Service Feature Restrictions (SFC) - Day Tab

You are then allowed to provide a description of the SFC number selected, and the service features to be assigned to the SFC number.

- Selecting the Use Default Service Features check box limits the service features to those features annotated with a check mark in the list.
- Selecting the **Only Show Selected Features** check box allows you to only display those features chosen for that particular SFC number.
- Clicking the Clear All button will remove all previously selected service features for the listed SFC number.

When the Night tab is selected, Figure 7-6 displays.

Edit Service Feature Restrictions (SFC) Day Night Allow Day and Night Service Feature Restrictions Use Default Service Features ☑ 1: Outgoing Trunk Queuing 2: Call Back 3: Executive Right-of-Way (Calling) ☑ 4: Executive Right-of-Way (Called) ∇ 5: Call Waiting - Originating (Calling). 6: Call Waiting - Originating (Called) 7: Call Forwarding - All Calls 8: Call Forwarding - Don't Answer 9: Call Forwarding - Busy Line ▼ 10: Call Hold ☑ 11: Data Line Privacy/Attendant Camp On (0 = Privacy / 1 = Camp On) ✓ 12: Speed Calling System. ■ 13: Trunk Answer (TAS) ■ 14: System Message Detail Recording (SMDR) - Trunk Basis **1**5: -16: Line Load Control □ 17: -■ 18: -Clear All Only Show Selected Features OK Cancel

Figure 7-6 Edit Service Feature Restrictions (SFC) - Night Tab

- Selecting the Allow Day and Night Service Feature
   Restrictions check box allows the service feature restrictions to
   be available day or night.
- Selecting the **Use Default Service Features** check box activates the default service features.
- Selecting the **Only Show Selected Features** check box allows you to only display those features chosen for that particular SFC number.
- Clicking the Clear All button will remove all previously selected service features for the listed SFC number.

# **Route Restrictions Tab**



Information entered in the fields on the **Route Restrictions** tab are for Phase 1 installations only.

There are 16 **Route Restriction Classes** (RSC) and 16 **Service Feature Classes** (SFC) available on your system. You can use **Route Restriction Classes** to prevent, for example, lobby phones from making outgoing calls. You can use **Service Feature Classes** to assign a group of phones a Class of Service feature, such as providing call forwarding for all guest phones.

Your system, by default, lists each restriction class with a numeric code, such as RSC-0. Installation Manager lets you create meaningful text descriptions for each level, such as "Guest Phone RSC-0", making it easier to administer and maintain restriction classes.

You can use the **Route Restrictions** tab to enable or disable individual classes, and to specify whether they apply to Day or Night service, or both. You can also specify whether route restrictions should apply to incoming/outgoing attendant or direct-dialed calls.

The **Route Restrictions** tab (Figure 7-7) defines criteria which determine how a call will be handled when originating or terminating over a specified route. The feature also lets you specify different restrictions when your server operates in day or night mode. It is utilized to define templates that will be used for each phone to describe the characteristics of each user's phone. It specifies templates for those users who have access to the rich features of the system.



The routes are defined in the **Hardware Tab** using the Media Gateway definitions located in the **Media Gateway and Circuit Cards Tab**.

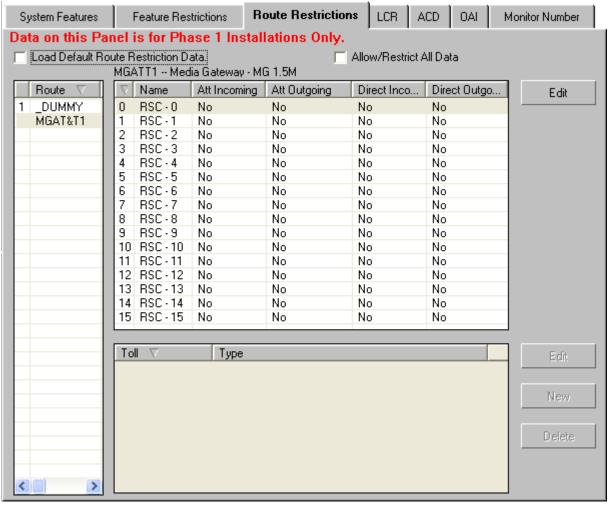


Figure 7-7 Advanced Features - Route Restrictions Tab

The Route Restrictions (RSC) (see Figure 7-7) provides a list of restriction classes in the system. The list is provided as an enhancement. It allows the MA4000 Installation Manager user to name the 16 available restriction templates (classes) with a meaningful name.



Media Gateway circuit cards listed in the **Routes** section are created using the **Media Gateway and Circuit Cards** section of the **Hardware Information** tab. See "Media Gateway and Circuit Cards" on page 5-9.



Installation Manager will program ANY class that is assigned to a station. If only RSC-1 is assigned, then that is the only class programmed. But if all 16 classes are assigned to the various phones, then Installation Manager will program all 16 classes, etc.

Classes that are assigned a Description but are not assigned to a phone will not be programmed by Installation Manager.

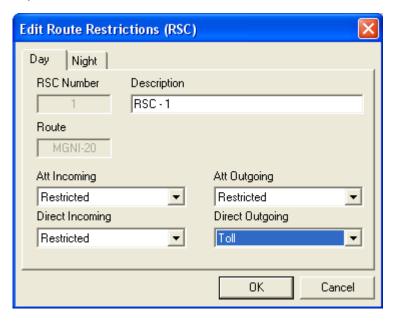
- Load Default Route Restrictions Data check box
   (Optional) Click the Load Default Route Restriction Data check box to instruct your system to use pre-programmed default routes.
- Allow/Restrict All Data check box

(Optional) Click the **Allow/Restrict All Data** check box to instruct your system whether to allow or restrict Attendant Incoming, Attendant Outgoing, Direct Incoming, or Direct Outgoing Calls.

#### • RSC Edit button

When you select a Route Restriction Class, and click the Edit button, Figure 7-8 displays. You are then allowed to assign a class name and a detailed description for that class.

Figure 7-8 Edit RSC - Day Tab



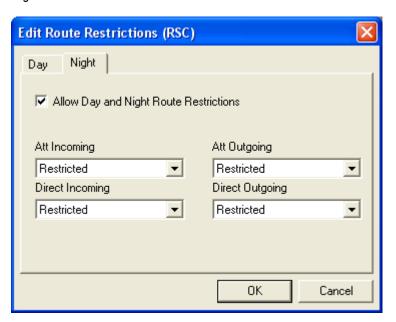
- The RSC Number field displays the RSC selected for editing, while the **Description** field provides you the opportunity to enter a more descriptive label, if desired.
- The **Route** field displays the Media Gateway circuit the RSC being edited is located.
- The Alt Incoming, Alt Outgoing, Direct Incoming, and Direct Outgoing drop-down fields allow selection of either the Allowed or the Restricted options for those features. The Direct Outgoing drop-down field also allows the selection of the Toll option.



When the **Toll** option is selected, the **Toll** section located below the **RSC** section becomes active allowing editing.

Figure 7-9 displays when the **Night** tab is selected.

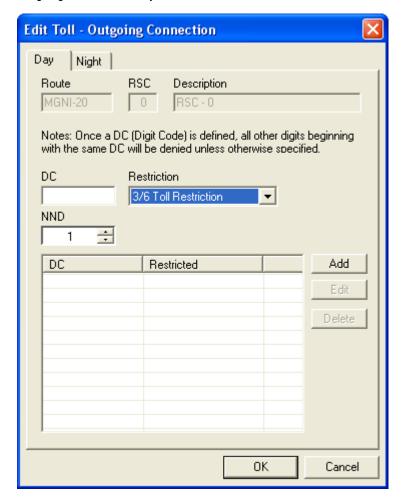
Figure 7-9 Edit RSC - Night Tab



# • New Toll button

Select a Route Restriction Class, and click the **New** button, Figure 7-10 displays.

Figure 7-10 Edit Toll - Outgoing Connection - Day Tab



 The Restriction drop-down field allows selection of either the Restricted, Allowed, 3/6 Toll Restriction, or Operator restrictions.

Figure 7-11 displays when the **Night** tab is selected.

Day Night

Allow Day and Night Toll Route Restrictions

Restriction

3/6 Toll Restriction

NND

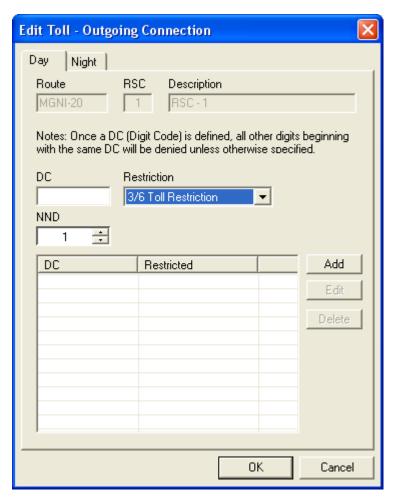
Figure 7-11 Edit Toll - Outgoing Connection - Night Tab

 Using the **Day** tab, when the **3/6 Toll Restriction** option is selected, Figure 7-12 displays.

ΟK

Cancel

Figure 7-12 Edit Toll - Outgoing Selection



- Selecting the **Add** button displays Figure 7-13.

Figure 7-13 Edit Route Toll Restriction



- Enter the destination and whether their is a restriction or not.

## **Least Cost Routing (LCR) Tab**

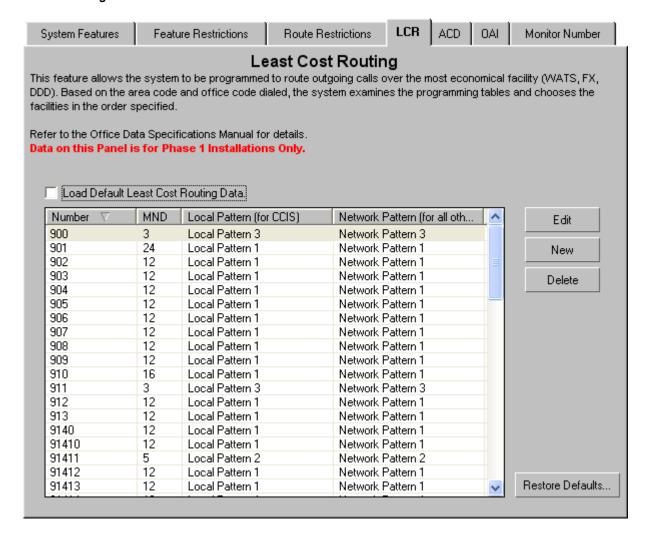


Information entered in the fields on the **Least Cost Routing (LCR)** tab are for Phase 1 installations only.

Use the **Least Cost Routing (LCR)** tab (Figure 7-14) to configure the server to route calls over the most economical facility available, such as WATS lines, foreign exchanges, or direct dial lines. Based on the area code and office code entered, the system refers to the programming tables which determines, in order, the most economical route for the call.

Using Installation Manager, you can configure your system to use a supplied set of default LCR routes, edit them to your own requirements, or create new routes. You can also specify conditions (or number patterns) that determine when the routes will be used, as well as certain times of day when they are in effect.

Figure 7-14 Advanced Features - LCR Tab



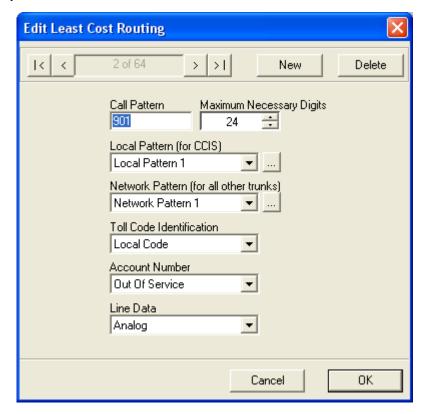
You can enable the **Least Cost Routing** by deselecting the **Load Default LCR** check box.

Step 1 Choose the LCR number to be programmed and select the **Edit** button. Figure 7-15 displays.



To create a new LCR entry, select the New button.

Figure 7-15 Edit System Features

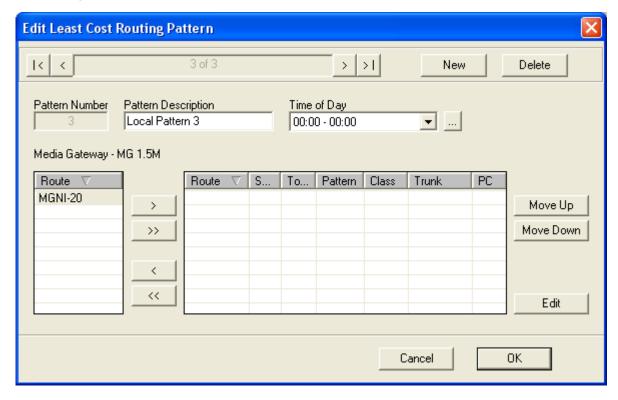


- **Step 2** Enter the **Call Pattern** information. The system will then use this pattern to match a user's dialed digits and invoke LCR for the call.
- Step 3 Select the number of digits from the Maximum Necessary Digits drop-down field that the system will scan. The Maximum Necessary Digits number is the number of digits (from left to right) the system waits before sending a call for further processing. If the number contains fewer than the Maximum Necessary Digits, the system waits as follows:
  - —Interdigit Timeout (typically 10 seconds) x the missing digits number
  - —For example, if the Maximum Necessary Digits is 12 and the system receives 10 digits, it waits 2 x 10 = 20 seconds before processing the call.
    - 2 (numDigits missing) x 10 (interdigit timeout) = 20

At this point, the user may need to configure a local or network pattern. If so, the user can optionally specify whether the LCR is invoked only during certain time periods. The user must specify the number of digits (in the dialed stream) the system will strip out (digits to skip). For example, deleting 9 and 1 for a long distance call. The system looks at digits from left to right and begins stripping "on the left".

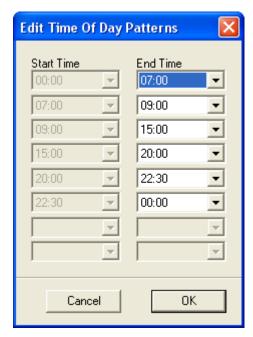
- **Step 4** Choose the desired option from the following drop-down fields:
  - —Local Pattern (for CCIS): Local Pattern 1, Local Pattern 2, Local Pattern 3, None, or New. This option specifies the sequence of routes a call matching the pattern will use. You can use an existing pattern or create your own.
  - —Network Pattern (for all other trunks): Network Pattern 1, Network Pattern 2, Network Pattern 3, None, or New. This option also specifies the sequence of routes a call matching the pattern will use. You can use an existing pattern or create your own.
  - —When the Browse button located next to the Local Pattern (for CCIS) or Network Pattern (for all other trunks) is selected, Figure 7-16 displays.

Figure 7-16 Edit Least Cost Routing Pattern



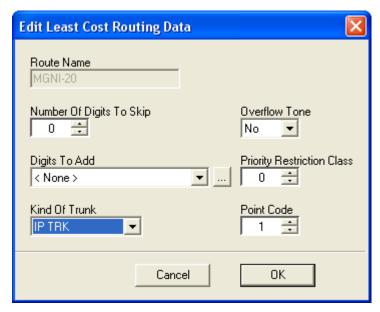
Step 5 The Time of Day field allows the user to define the time of day patterns.
Select the Browse button located next to the Time of Day field. Figure 7-17 displays.

Figure 7-17 Edit Time of Day Patterns



- —Enter the desired time sequences, not to exceed 24 hours.
- Step 6 To edit a circuit card's routing, choose a circuit card (or cards) listed in the **Route** field and use the **Right Arrow** button to move the card to the editing section.
- Step 7 To edit a specific card, choose the card and select the Edit button. Figure 7-18 displays.

Figure 7-18 Edit Least Cost Routing Data



- Step 8 Using the **Number of Digits to Skip** field, the user must specify the number of digits (in the dialed stream) the system will strip out (or digits skipped). For example, deleting 9 and 1 for a long distance call.
  - —The system looks at digits from left to right and begins stripping on the left.
- **Step 9** Specify whether the user will hear an overflow tone if all lines in the selected trunk are full using the **Overflow Tone** field.
- Step 10 Use the Digits to Add field to enter a number that will be added at the beginning of the number sequence. For example, if the Number Of Digits To Skip Number is 5, and the Digits To Add number is 214, then a starting number of 91817-479-9986 would be translated to 214-479-9986.
  - —When the Browse button next to the Digits to Add field is selected, Figure 7-19 displays.

Figure 7-19 Additional Digit Translation (AADC)



- Step 11 Enter the additional digits and select the OK button.
- Step 12 Select the Priority Restriction Class.
- Step 13 Use the Kind of Trunk field to specify whether the trunk is IP or non-IP.
- Step 14 If IP was selected, use the Point of Code field to set the point code.
- Step 15 The configured route now appears on the list. It can be moved up or down, which determines the sequence in which the calls attempt to find a trunk. For example, a call matches the LCR pattern, then attempts completion using the first trunk listed. If that is full, it then goes to the next trunk and so forth. Each choice is less desirable than the preceding one.
- **Step 16** Use the **Toll Code Identification** field to specify whether the call should be identified as a toll call or local call.
- Step 17 Use the Account Number field to specify whether an account number is necessary to access the selected trunk in the LCR.
- Step 18 Use the Line Data field to specify whether the line data is digital or analog.

# **Automated Call Distribution (ACD) Tab**

The **ACD** tab (Figure 7-20) is used to configure the ACD system to connect large amounts of incoming calls automatically to groups composed of ACD agent positions. These calls are processed in the order of their arrival, and are distributed evenly among the ACD agent positions in order to optimize personnel and save cost.

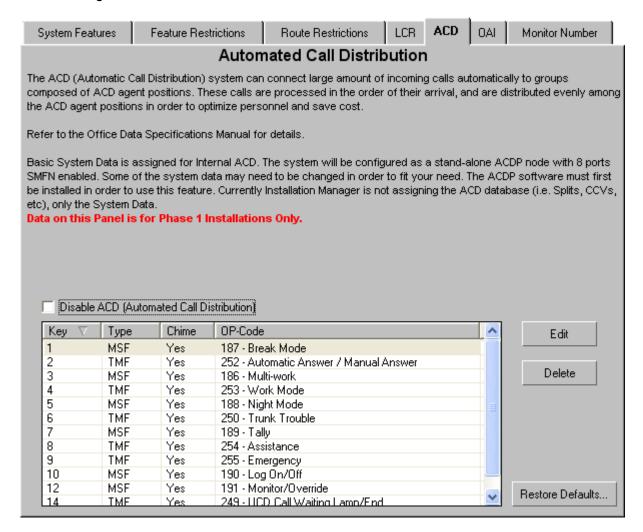


Information entered in the fields on the **Automated Call Distribution (ACD)** tab are for Phase 1 installations only.



The ACDP software must first be installed in order to use this feature. The Installation Manager is currently not assigning the ACD database (i.e., Splits, CCVs, etc.), only the System Data.

Figure 7-20 Advanced Features - ACD Tab

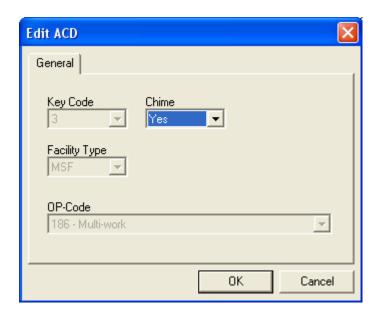


You can disable the Automated Call Distribution by selecting the **Disable ACD (Automated Call Distribution)** check box.

• Edit button

When you select a OP Code Key, then click the **Edit** button, Figure 7-21 displays.

Figure 7-21 Edit ACD



 Modify the **Chime** field. The other fields cannot be changed from this ACD panel.



The TMF (Terminal Multiple Information Transfer Facility) and MSF (Terminal Mode Set Facility) are facilities that Voice Server supports for communicating with the Dterm Single-Line phone.

# **Open Application Interface (OAI) Tab**

The OAI Systemtab (Figure 7-22) is the interface joining a variety of facilities in the switch to the application programs in an external computer in accordance with the basic reference model of the Open Systems Interconnection (OSI) standardized by the ISO. The switch can be controlled by the external computer through the OAI system and offer users unique added values.

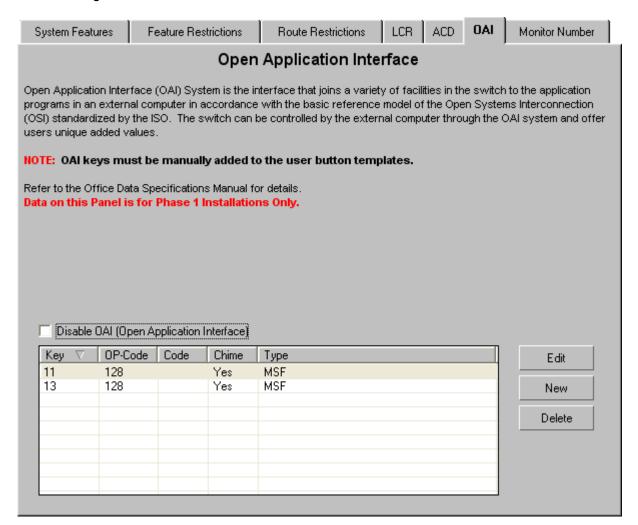


Information entered in the fields on the **Open Application Interface (OAI)** tab are for Phase 1 installations only.



The user is responsible for adding OAI keys to the user button templates.

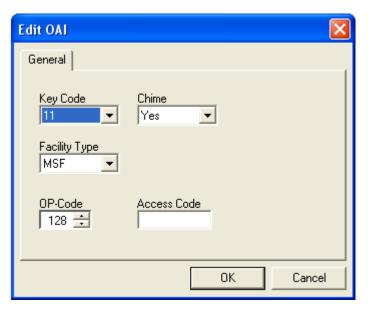
Figure 7-22 Advanced Features - OAI Tab



You can disable the Open Application Interface by selecting the **Disable OAI (Open Application Interface)** check box.

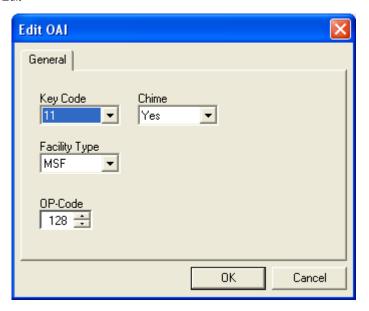
New button
 When the New button is selected, Figure 7-23 displays.

Figure 7-23 Edit OAI - New



- Enter or select the desired information in the Key Code, Chime, Facility Type, OP-Code, and Access Code fields.
- **Edit** button
  When the **Edit** button is selected, Figure 7-23 displays.

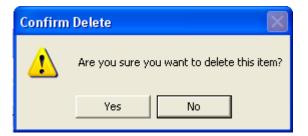
Figure 7-24 Edit OAI - Edit



- Modify the Key Code, Chime, Facility Type, and OP-Code fields, as needed.
- Delete button

To delete an existing OAI, highlight the OAI to be removed and click the **Delete** button. Figure 7-25 will display to confirm whether you want to delete the OAI.

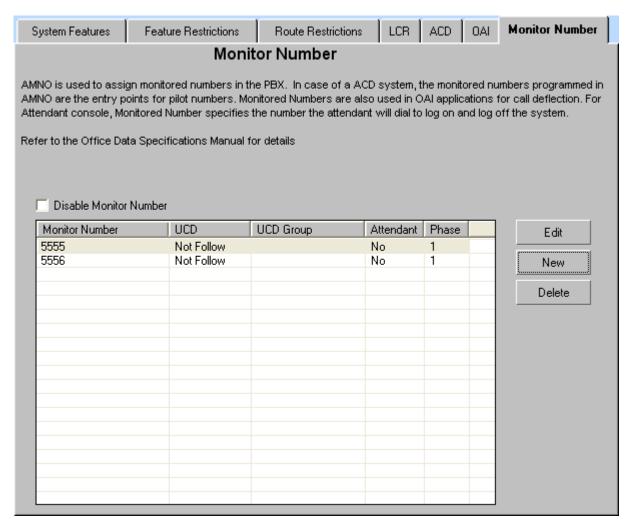
Figure 7-25 Confirm Delete



## **Monitor Number Tab**

AMNO assigns monitored numbers in the PBX. In a ACD system, the monitored numbers programmed in AMNO are the entry points for pilot numbers. Monitored Numbers are also used in OAI applications for call deflection. In the case of Attendant console, Monitored Number specifies the number the attendant dials to log on or log off the system. See Figure 7-26

Figure 7-26 Advanced Features - Monitor Number Tab

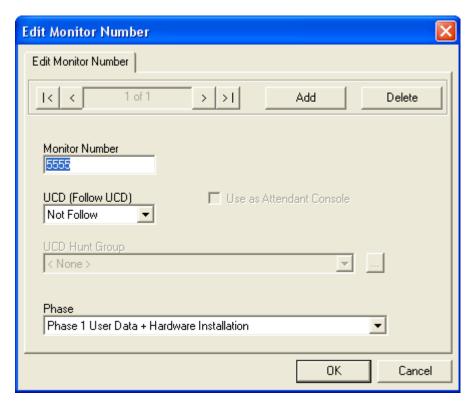


You can disable the Monitor Number by selecting the **Disable Monitor Number** check box.

• New button

When the **New** button is selected, Figure 7-27 displays.

Figure 7-27 Monitor Number - New or Edit

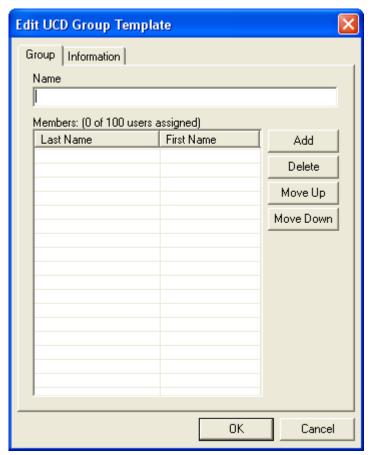


 Enter, modify or select the desired information in the Monitor Number, UCD (Follow UCD), Use as Attendant Console, UCD Hunt Group, and Phase fields.

## • UCD Hunt Group field

To modify the UCD Hunt Group, select the **Browse** button. Figure 7-28 displays.

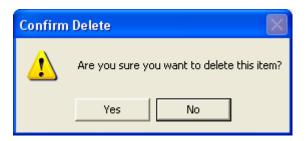
Figure 7-28 Edit UCD Group Template



## • **Delete** button

To delete an existing Monitor Number, highlight the Monitor number to be removed and click the **Delete** button. Figure 7-29 will display to confirm whether you want to delete the Monitor Number.

Figure 7-29 Confirm Delete



8

# **User Assignments**

This chapter describes the MA4000 Installation Manager's **User Assignments** section.

The **User Assignments** (Figure 8-1) allows you to manipulate a large number of users from an easy to use graphical user interface. Import and Export, from and to CSV formatted files can be handled easily, no matter the size. In fact, the larger the import file the greater the time savings that can be achieved due to the efficiency and powerful capabilities afforded by the MA4000 Installation Manager.

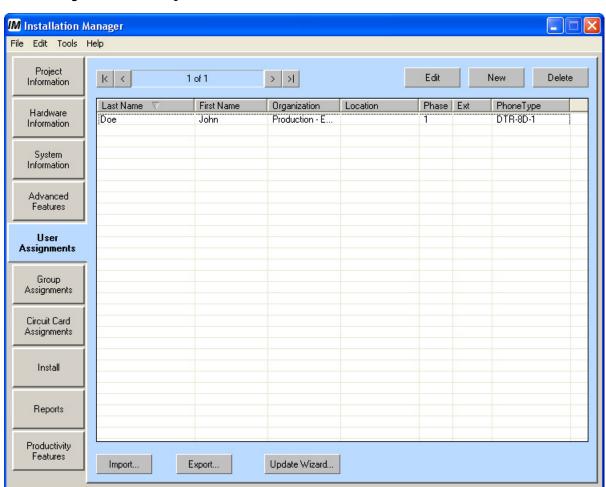
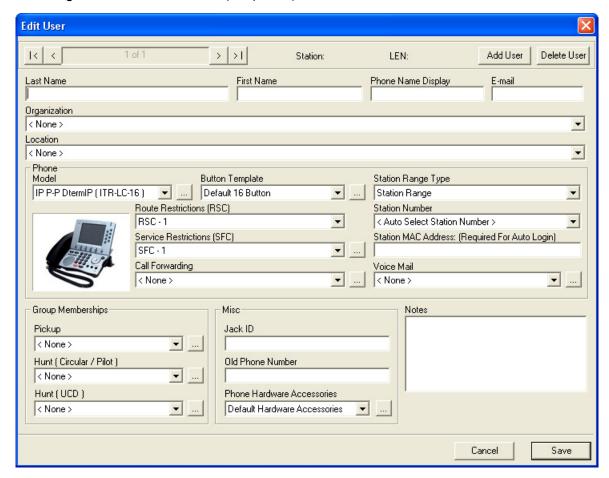


Figure 8-1 User Assignments Tab

#### • Edit button

You can select one or more records, then click the Edit button. Figure 8-2 and Figure 8-3 (Business system type) or Figure 8-4 and Figure 8-5 (Hospitality system type) displays. You can then edit all the records selected, one at a time.

Figure 8-2 Edit User - Business (except UMG)



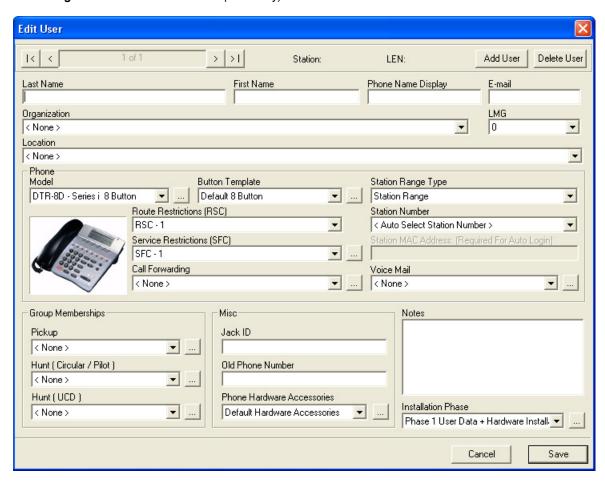


Figure 8-3 Edit User - Business (UMG only)

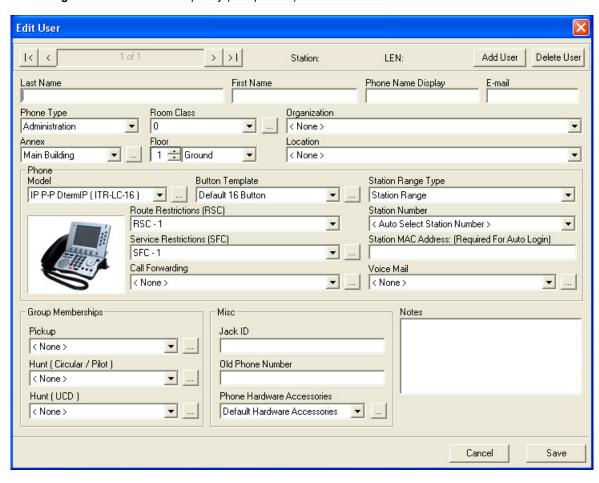


Figure 8-4 Edit User - Hospitality (except UMG)

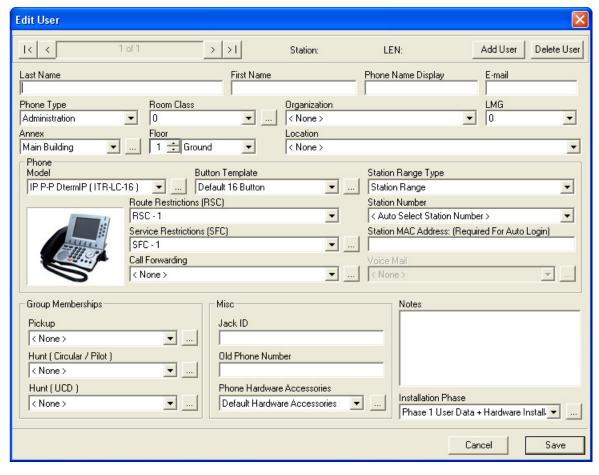


Figure 8-5 Edit User - Hospitality (UMG only)

#### • Add User button

The **Add User** button allows you to quickly add users while remaining in the Edit User dialog. When the **Add User** button is clicked, the user's name fields will blank out. All other fields will remain. You can quickly add users with common information.

## • Delete User button

The **Delete User** button deletes the current record. Figure 8-6 will be display.

Figure 8-6 Warning - Delete User Profile



## **User Assignments - New or Edit User**

#### Last Name field

Last name of the user.

#### First Name field

First name of the user.

## Phone Name Display field

Displays when you call another station. The length of this string, and its location, is dependent on the system settings. See "Station Ranges Tab" on page 6-2.

#### E-mail field

The contacts e-mail address. This information will be programmed in the UM4730 Voice Mail system mailbox, if applicable.

## Phone Type field (Hospitality Only)

Select either the administration or guest room telephone type.

## Room Class field (Hospitality Only)

Enter the room class (0 through 14). Each class label can be changed by selecting the specific class, clicking **Browse**, and entering the new label in the Edit Room Class dialog box **Description** field.

## Organization field

Describes the organization of the user. The organization is defined in "Organization section" on page 4-8.

## **LMG** field (NEAX IPX UMG Only)

Use the **LMG** drop-down menu to specify the Local Module Group to which you are assigning the signaling server. (This step is only available on the NEAX IPX UMG.)

## **Annex** field (Hospitality Only)

Enter the annex location. Each annex label can be changed by selecting the specific annex, clicking **Browse**, and entering the new label in the Edit Annex dialog box **Description** field.

#### Floor field (Hospitality Only)

Select the floor number and elevation. The floor number is selected by using the field's scroll arrows. The elevation choices are **Ground** and **Underground**.

#### Location field

Used to identify the location of your phone.

#### Phone Model field

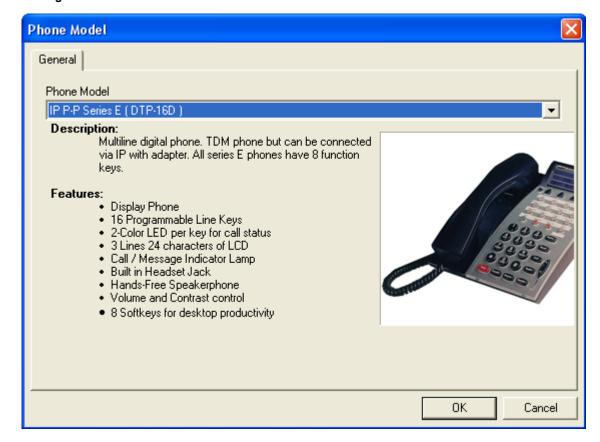


The models listed will be based on the **IP Phone Type** option selected in Chapter 6, System Information, Station Ranges Tab.

#### • Phone Model Browse button

Clicking the **Browse** button located next to **Phone Model** field allows you to access additional information addressing the phone model as shown in Figure 8-7. This dialog provides a detailed description the phone and a list of its features.

Figure 8-7 Phone Model - General Tab



#### Phone Model field

You can select a model and view detailed information on that particular phone.

## **Button Template field**

The **Button Template** field allows you to select a button template. This template contains definitions for the buttons for that particular phone model.

#### • Phone Model Browse button

You may edit the template by clicking the "..." button. In this case, editing will effect the template for all users assigned that template.

The Button Layout editor is a single application that handles the button layout template editing for 2, 8, 16, 24, and 32 button phones in the E Series, I Series, Dterm IP (ITR), and INASET (ITR-LC) phone models.

Figure 8-8, Figure 8-13, and Figure 8-14 display the Button Template editor.

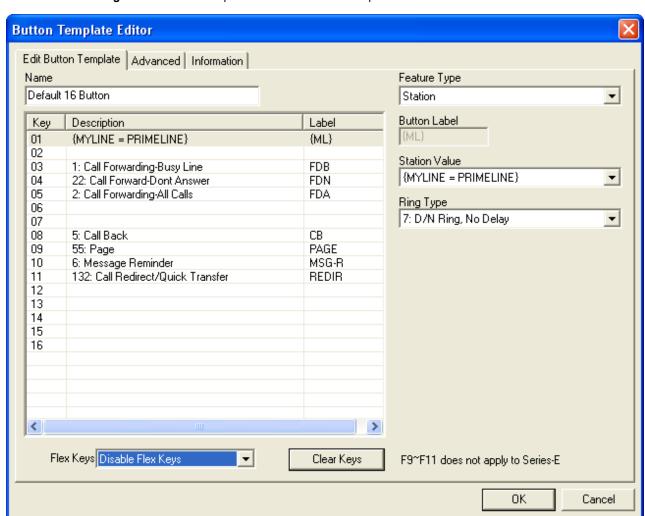


Figure 8-8 Button Template Editor- Edit Button Template Tab

#### - Macros

All template editors make heavy use of macros. When the project is compiled, the MA4000 Installation Manager provides a value for each user wherever the macro is used. See Table 8-1.

Table 8-1 Macros

Macro	Description	TEC
{MYLINE = PRIMELINE}	This is the primary physical phone number (assigned to the hardware LEN with a physical station number) of the user and is to be set as the Prime Line.	TEC = 12
{MYLINE}	This is the primary physical phone number (assigned to the hardware LEN) of the user but it is not set as the Prime Line.	TEC = 12
{PRIMELINE}	This is the line which is selected by default when the station is off-hook This number is assigned from the OFFSET Station Range.	TEC = 18
{SUBLINE}	A Subline applied to a button of a phone would not be automatically placed in a Pilot Hunt Group with the MyLine/PrimeLine of the phone. Only one SUBLINE is allowed per key Data Template. This number is assigned from the OFFSET Station Range.	TEC = 18
{ADDITIONAL SUBLINE}	This is used in configurations with more than one defined {SUBLINE}.	TEC = 18
{USER NAME}	Provides pull-down menu to select user	TEC = 3, 12, 18
{MANUAL ENTRY}	Provides an edit box to enter a numeric value for a station	TEC = 3, 12, 18
{DSS ENTRY}	Provides DSS information for a station	TEC = 3, 12, 18

## - Button Template Editor - Edit Button Template Tab

#### • Name field

The name of the button layout template is the value shown in the list of button layout templates on the Edit User dialog.

## • Feature Type field

The Feature Type field provides a list of available features. Available options are displayed in Figure 8-9 through Figure 8-11.

## • Key Data Programming list

The list located below the Name field (see Figure 8-8) displays each key, a description of the programming for that key, and the label. This area does not provide direct editing capabilities. You can select a key and assign a value using the data entry boxes to the right of the list.

## • Flex Keys field

This field allows you to either show or hide the Flex Keys.

## • Clear Keys button

Clicking the **Clear Keys** button eliminates all the key definitions currently existing in the Key Data Programming List.

Figure 8-9 Button Template Editor - Feature Type: Not Assigned



Figure 8-10 Button Template Editor - Feature Type: Function



#### • Button Label field

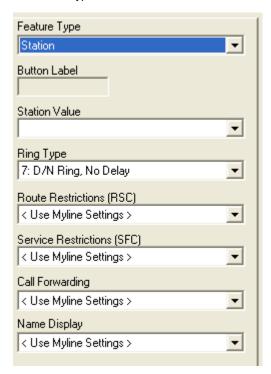
The suggested, editable label for the function selected.

#### Feature By Name field

The **Features By Name** combo box is a filter for the list. The user is able to simply select from a list of Call Forwarding features rather than search through hundreds of other features.

A user can assign a feature to a key by selecting the key in the listing and then double click the feature in the Features list. The result is that the feature is assigned. The numeric value of the function as specified by the SV7000, R16 manual. You can display all the features available, or just by the ACD, AD64, Call Forwarding, CALL PICKUP/PAGE, or FLEX group.

Figure 8-11 Button Template Editor - Feature Type: Station



#### • Button Label field

The suggested, editable label for the function selected.

• Station Value field

You can select from those items listed in Table 8-1.

• Ring Type field

You can select from a list of seven different ring types to the user:

- 0: No Ring
- 1: Day Ring, No Delay
- 2: Night Ring, No Delay
- 3: ...Not Used...
- 4: D/N Ring, 30 Second Delay
- 5: D/N Ring, 20 Second Delay
- 6: D/N Ring, 10 Second Delay
- 7: D/N Ring, No Delay

Each selection has a number associated to it for quick data entry. For instance, a 7 results in a No Delay ring type.

## • Route Restrictions (RSC) field

You can select either **Use Myline Settings** or **RSC - 0** through **RSC - 15**.

• Service Restrictions (SFC) field

You can select either **Use Myline Settings**, **SFC - 0 Reserved for Trunks**, **SFC - 1** through **SFC - 13**, **SFC -14 Conferencing**, or **SFC - 15 ACD**.

• Call Forwarding field

You can select either the **Default Call Forwarding**, **None**, **Use Myline Settings**, or **New** option.

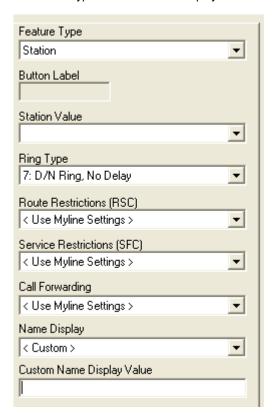
• Name Display field

Select the **None**, **Use Myline Settings** or **Custom** option.



If the **Custom** option is selected in the **Name Display** field, the **Custom Name Display Value** field displays.

Figure 8-12 Button Template Editor - Feature Type: Station - Name Display: Custom



## Button Template Editor - Advanced Tab

The Advanced tab (Figure 8-13) consists of system specific data or data that is typically defaulted for 90% or more of the user.

Figure 8-13 Advanced - Button Template - Advanced Tab

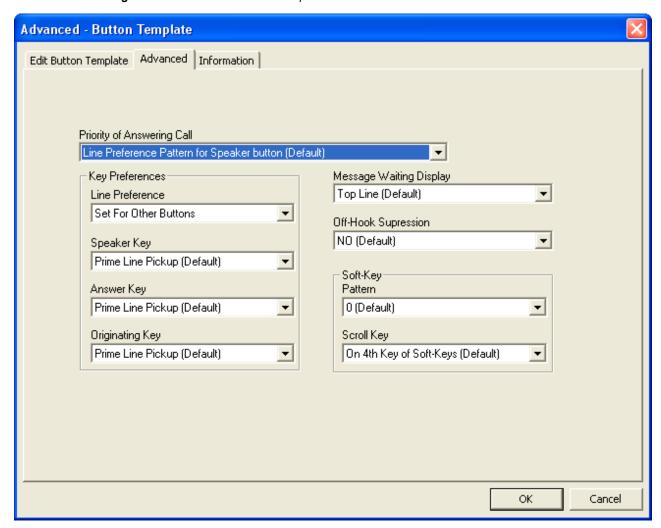


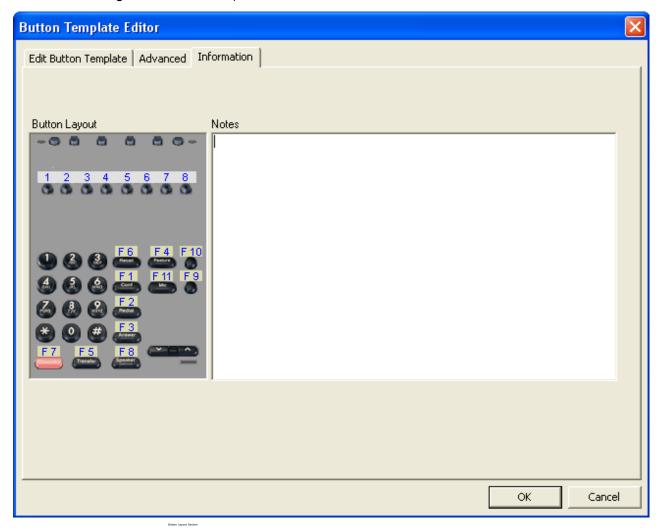
Table 8-2 Advanced Button Template Options

Field	Options	
Priority of Answering Call	Line Preference Pattern for Speaker Button (Default)	
	Dial ICM, Line Preference Pattern for Speaker Button	
	Automatic ICM, Line Preference Pattern for Speaker Button	
	Manual ICM, Line Preference Pattern for Speaker Button	
	Automatic ICM, Manual ICM, Line Preference Pattern for Speaker Button	
Key Preferences		

Field	Options
Line Preference	<ul> <li>Prime Line Pickup (Default)</li> <li>Set For Other Buttons</li> <li>Note: Speaker, Answer, and Originate Preference areas are only configurable if the Line Preference = "Set For Other Buttons"</li> </ul>
Speaker Key	<ul> <li>Prime Line Pickup (Default)</li> <li>Idle-Line</li> <li>Incoming-Line</li> <li>Ringing-Line</li> </ul>
Answer Key	<ul><li> Prime Line Pickup (Default)</li><li> Incoming-Line</li><li> Ringing-Line</li></ul>
Originating Key	Prime Line Pickup (Default) Idle-Line Prime/Idle-Line
Message Waiting Display	Top Line (Default) Bottom Line
Off-Hook Suppression	No (Default) Yes Note: Selecting Yes enables support for offhook suppression.
	Soft Key
Pattern	<ul> <li>0 (Default)</li> <li>1 to 15</li> <li>Note: The Soft Key Pattern offers the user a choice between pattern 0 to 15. These patterns are stored in the switch. The patterns themselves will not be programmed by MA4000 Installation Manager.</li> <li>Important: There may be some models that do not have Soft Keys. In those cases, the Soft-Key Pattern and Scroll Key controls will be ignored.</li> </ul>
Scroll Key	On 4th Key of Soft-Keys (Default) Allow on Line/Feature Keys

## Button Template Editor - Information Tab

Figure 8-14 Button Template Editor - Information Tab



The graphic of the phone is provided to the user to show them the button layout. This helps the user match up a particular button with the key number in the list to the right. The graphic is static and provides no interaction. The picture simply displays the location of each button by number.

## • Notes field

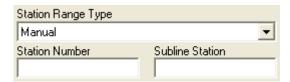
The notes are displayed in the Manage Template listing.

## Station Range Type field

This section changes depending on the Type selection.

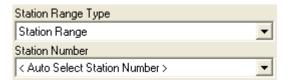
## • Manual Option

You can manually assign an extension number to this user. The user enters the station number in the **Station Number** field.



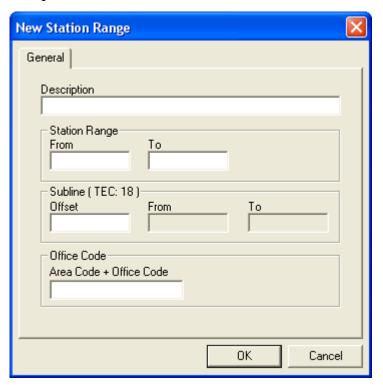
## • Station Range

Allows the automatic selection of the station number or creation of a new number.



To create a new Station Range, select the < New... > option. When Figure 8-15 displays, enter the desired information.

Figure 8-15 New Station Range



## Route Restrictions (RSC) field

The Route Restriction numbers in the system. There are only 16 available, numbered 0 through 15.

## Service Restrictions (SFC) field

The Service Feature Class numbers in the system. There are only 15 available, numbered 1 through 15. Figure 7-5 displays when the **Browse** button is selected.

## Call Forward field

The **Call Forward Template** allows the user to select a template that will be used to apply the call forwarding behavior for this user.

Selecting the **Browse** button will display a dialog behaving slightly differently depending on the system setting for Call Forwarding. Figure 8-16 and Figure 8-17 are the same for either type of Call Forwarding setting.

Figure 8-16 Edit Call Forwarding Template - General

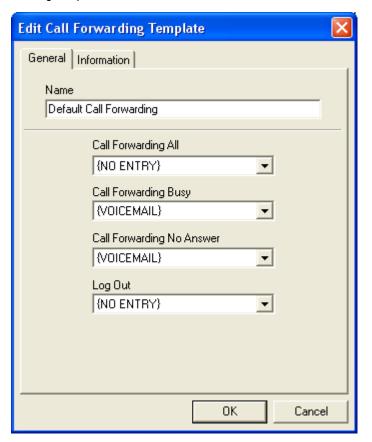
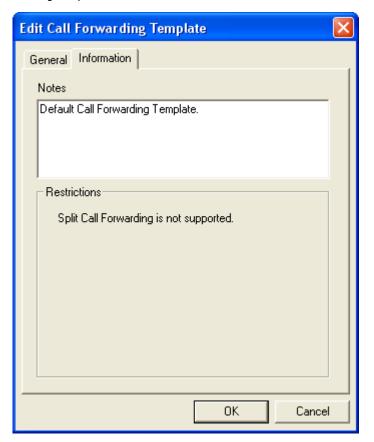


Table 8-3 Edit Call Forwarding Template Options

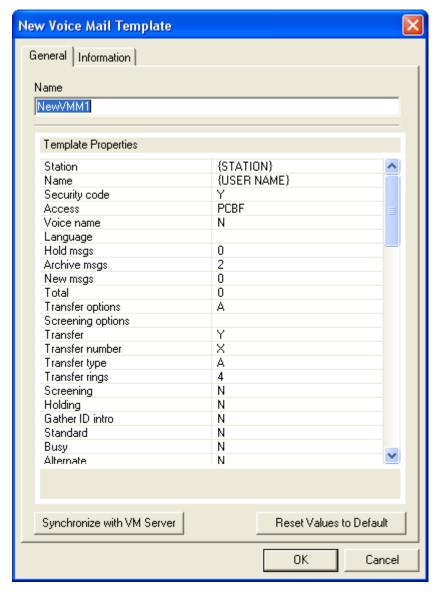
Option	Description
{NO ENTRY}	Do not program this call forwarding option.
{VOICE MAIL}	Assign the voice mail pilot number here.
{ATTENDANT}	Assign the attendant console number as defined in the <b>System Options</b> tab.
{SUBLINE}	Allow call forwarding to subline.
USER NAME	Provides a display area and user interface mechanism for assigning a user to this call forwarding feature. During compiling, the user name is replaced with their actual station number they are provided.
MANUAL ENTRY	Provides an edit box for the user to enter a numeric value for a station.

Figure 8-17 Edit Call Forwarding Template - Information



## **Voice Mail Template**

Figure 8-18 New Voice Mail Template - General



## Synchronize with VM Server button

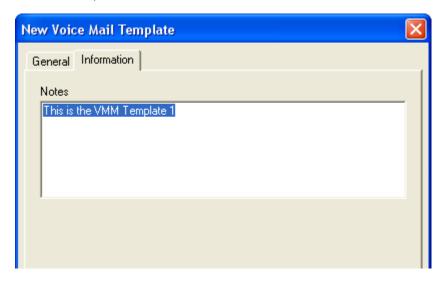


This option is not available unless the Voice Mail is programmed and on-line.

## Reset Values to Default button

Select this button to reset the current template properties to the default values.

Figure 8-19 New Voice Mail Template - Information



## **Group Memberships** section

## **Understanding the Group Assignments**

The Group Assignments lets you define call handling for groups of users. Groups should contain at least two members. If you create a new group containing fewer than two members, Installation Manager displays a warning dialog and will write an error notice to the installation log during a compile. You can create five types of group assignments:

- **Hunt Group Circular**: An incoming call proceeds through a group of up to 100 stations until it reaches a not-busy station. Calls to any member of this group will be processed the same way. The secretary station is optional. If it exists, the call will be directed to the secretary station if all the stations in a hunt group are busy.
- **Hunt Group Pilot**: Incoming calls to the pilot number begin the hunting sequence. Calls to busy stations, other than the pilot number, receive a busy tone. The secretary station is optional. If it exists, the call will be directed to the secretary station if all the stations in a hunt group are busy.
- **UCD Group**: Incoming calls are distributed to a group of up to 100 stations. Calls are distributed to idle stations in a circular pattern, in the order in which they arrive.
- **Pickup Group**: A group of stations with the ability to pick up calls made to any other member of the group.
- **Secretary**: A user can be defined as a secretary allowing that user to be used by the group assignment. A secretary can be assigned to multiple groups (multiple secretary feature), but not as a member of the Pilot or Circular Hunt groups.

Figure 8-20 Edit User - Group Memberships



#### Pickup field

In the event a member is already assigned to a hunt or pickup group, selecting a different template from the list will have the effect of removing them from the prior hunt/pickup group and adding them to the new one (only allowed in the case that the new hunt/pickup group is not already full). In the case where the new hunt/pickup group is full already, the user will be prompted to either edit the newly selected pickup group to make room for this member, or add a new pickup group template. See Figure 8-21, Figure 8-22, and Figure 8-23.

New Pickup Groups Template

General Information
Name

Members (0 of 100 users assigned)

Last Name First Name Add

Delete

Move Up

Move Down

OK Cancel

Figure 8-21 New Pickup Group Template - General

# • Add button

The **Add** button creates a new entry. Figure 8-22 displays.

• Delete button

The **Delete** button removes a selected entry.

• Move Up button

The **Move Up** button moves an entry up until the entry is located where you want it to be.

• Move Down button

The **Move Down** button moves an entry down until the entry is located where you want it to be.

Figure 8-22 Select Users

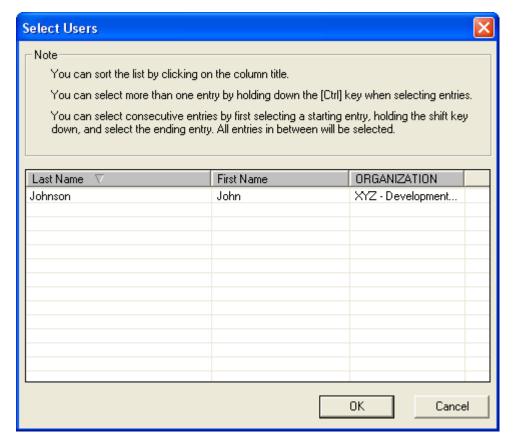
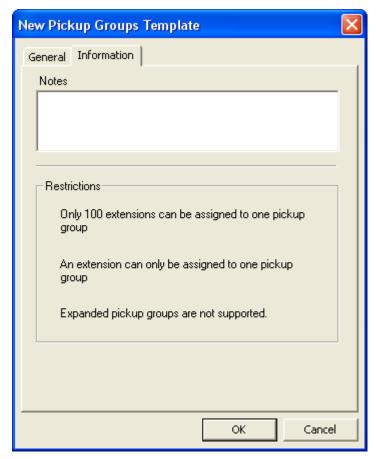


Figure 8-23 New Pickup Group Template - Information



 The **Notes** field allows the user to enter any free form text associated with a user.

#### **Hunt Fields**

When a hunt group template is chosen the user is automatically added to the hunt group. The template determines whether the hunt group is Circular, Pilot, or UCD.

In the event that the hunt group already has 100 members, the user will be notified and given the option to create a new group or edit the selected group to make room for this member.

In the event a member already is assigned to a hunt or pickup group, selecting a different template from the list will have the effect of removing them from the prior hunt group and adding them to the new one (only allowed in the case that the new hunt/pickup group is not already full). In the case where the new hunt/pickup group is full already, the user will be prompted to either edit the newly selected hunt/pickup group to make room for this member, or add a new hunt/pickup group template.

The user can select the **Browse** button to launch the *Hunt (Circular/Pilot)* and *Hunt (UCD)* field editors.

#### **Hunt (Circular/Pilot)**

#### Options:

- None
- New Circular Hunt Group (see Figure 8-24)
- New Pilot Hunt Group (see Figure 8-25)
- Secretary (see Figure 8-26)

Group Information

Name

Secretary (not required)

Members (0 of 100 users assigned)

Last Name First Name Add

Delete

Move Up

Move Down

OΚ

Cancel

Figure 8-24 Edit Hunt Group - Circular Template Option

Figure 8-25 New Hunt Group - Pilot Template Option

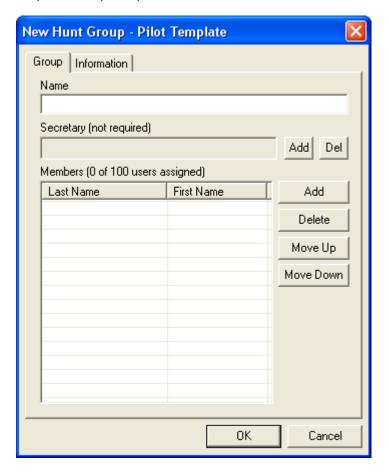
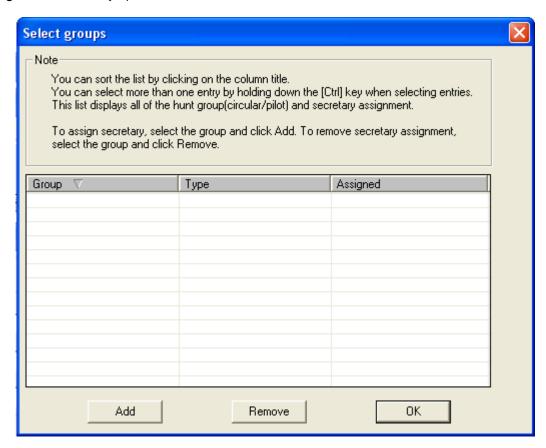


Figure 8-26 Secretary Option

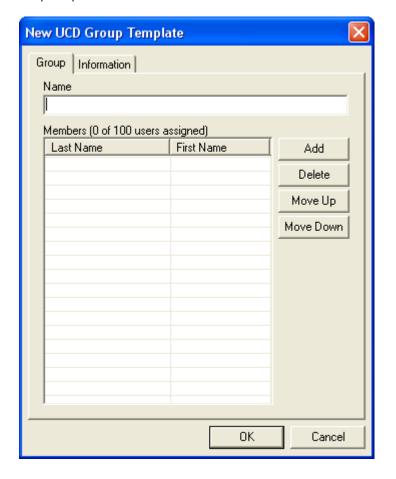


# **Hunt (UCD)**

# Options:

- None
- New (see Figure 8-27)

Figure 8-27 New UCD Group Template



# **Misc Section**

Figure 8-28 Misc.



#### Jack ID field

The **Jack ID** is used only for reporting purposes. It is useful when it comes to cable management, phone placement and running of crossconnects.

#### Old Phone Number field

The user's previous phone number.

#### Phone Hardware Accessories field

The user can select from a list of Phone Hardware Options templates (see Figure 8-29 and Figure 8-30). If the user clicks the **Browse** button, the user will be shown in the Accessories Editor.

This information is used for reporting purposes only. No validation will be performed. See Table 8-4 and Table 8-5.

Figure 8-29 Edit Phone Accessory Template - General

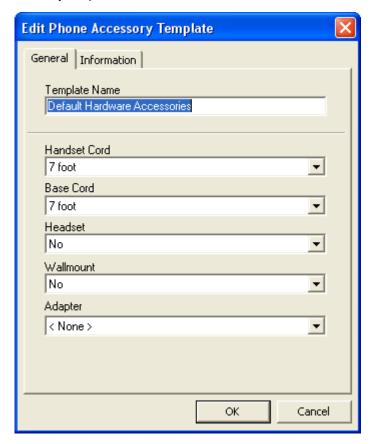


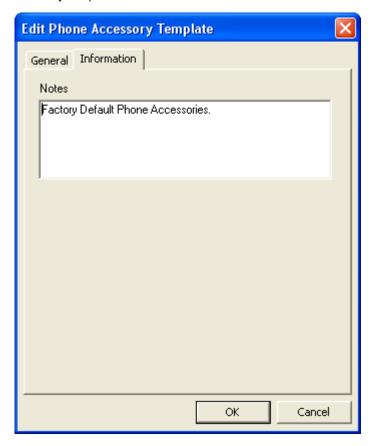
 Table 8-4
 Edit Phone Accessory Template Options

Option	Description	
Template Name	User enters a unique Phone Accessories Template name here.	
Handset Cord	This is the length of the cord from the handset to the base. The user has the choice from 7 foot, 12 foot, or 25 foot cords.	
Base Cord	The user has a choice of 7 foot, 14 foot, and 25 foot cords. This is the cable length from the phone to the wall.	
Headset	The user has the choice of Yes or No headset.	
Wallmount	The user has the choice of Yes or No for a wall mount adaptor.	
Adapter	The Adapter section only applies to phone types that are Series i or Series E. If this template is used on a phone that is neither one of these model, then the reporting will be off. Since this information is provided as a convenience to the user, and there is no system programming associated with any of these options, then it is up to the user to make this information meaningful. It is suggested that, if needed, the user create separate templates for phone models that support adapters and those that do not.  The column Common Listing will be the available selections in the Adapter drop-down box. See Table 8-5.	

Table 8-5 Phone Adapters

Series i	Series E	Common Listing	Remarks
AD(A)	ADA-U	ADA	Ancillary Device Adapter
AP(A)		APA	Analog Port Adapter w/o Ringer
AP(R)	APR-U	APR	Analog Port Adapter w/Ringer
	HFU-U	HFU	Hands Free Unit
CT(A)	CTA-U	CTA	Computer Telephony Adapter
CT(U)		CTU	Computer Telephony Adapter (USB)
IP-R	IPA-U	IPA	IP Adapter
	LLA	LLA	Long Line Adapter

Figure 8-30 Edit Phone Accessory Template - Information



#### • Delete button

The user must first select one or more items in the list shown in Figure 8-1, "User Assignments Tab" on page 8-1. Once they are selected, the user clicks the **Delete** button. Figure 8-31 displays. Clicking the **Yes** button will permanently delete the data from the project. Selecting the **No** button will cancel the operation.

Figure 8-31 Warning - Delete User Profile



# **Import** button

The **Import** button launches the *User Import Wizard*. The *User Import Wizard* allows the user to import the user information from a text (or .csv) file. The data format for the import file can be either:

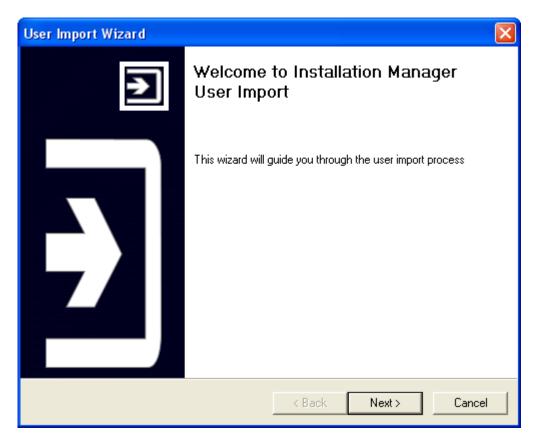
- Tab delimited
- Comma delimited

Both layouts are the standard for Microsoft Excel output format.

#### Import User Wizard

Welcome Panel

Figure 8-32 User Update Wizard - Welcome to Installation Manager User Import



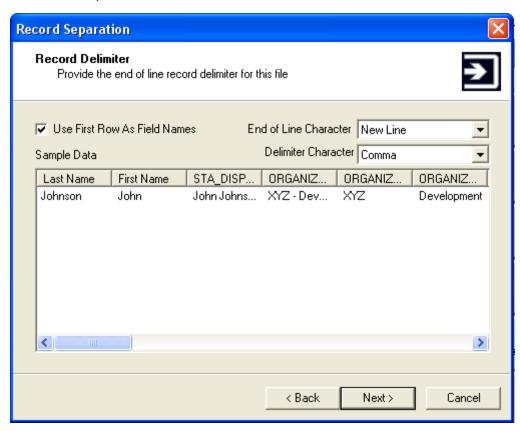
**Step 1** Select the **Next** button to proceed. Figure 8-33 displays.

Figure 8-33 User Import Wizard - Import File



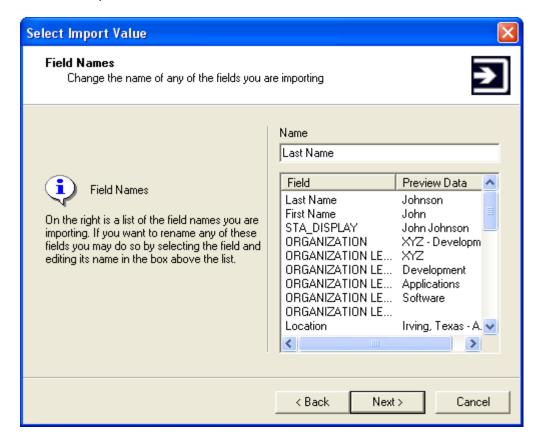
- Step 2 Use the Location of file field to specify the complete path and file name to be used to import users, or select the **Browse** button to open an existing file.
- **Step 3** After the file is selected, click the **Next** button to continue. Figure 8-34 displays.

Figure 8-34 Record Separation - Record Delimiter



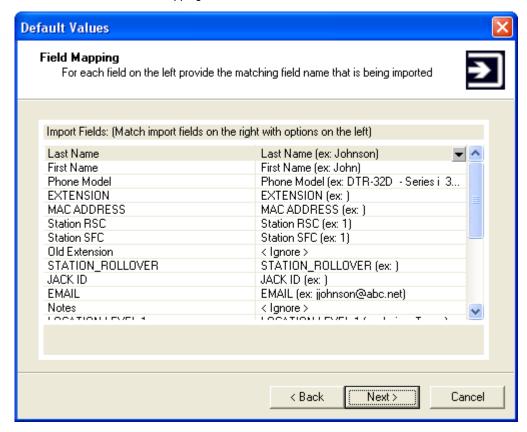
- **Step 4** Provide the end of line delimiter to use. The delimiter character choices are:
  - -Comma
  - -Space
  - —Tab
- Step 5 Click the Next button to continue. Figure 8-35 displays.

Figure 8-35 Select Import Value - Field Names



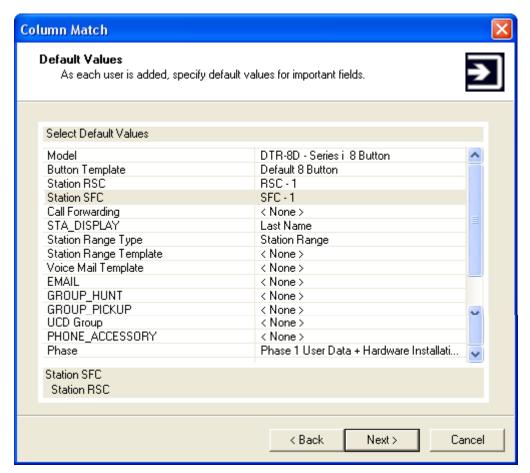
- **Step 6** You may change the name of any of the fields being imported by selecting the field name and editing its name in the **Name** field. When finished, click the **Next** button to continue.
- Step 7 Click the **Next** button when finished. Figure 8-36 displays.

Figure 8-36 Default Values - Field Mapping



Step 8 For each field option listed in the left column, use each drop-down box located in the right column to select the matching imported field. Figure 8-37 displays.

Figure 8-37 Column Match - Default Values



- **Step 9** Specify the default values for each important field for each user. When finished, click the **Next** button.
- **Step 10** The User Import Wizard will begin importing each file and creating new users. When finished, Figure 8-38 displays.

Completing User Import Data

You have successfully imported 1 records

| Aback | Finish | Cancel |

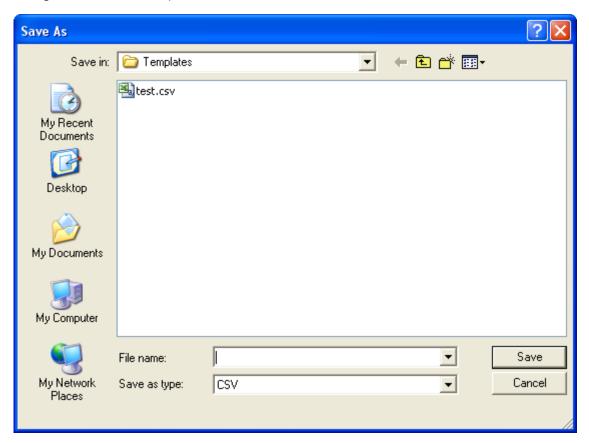
Figure 8-38 User Import Wizard - Completing User Import Data

- **Step 11** After the file is imported, the user is presented with the results of the import. If there were any errors, they will be reported here as well.
- Step 12 Click the Finish button to close the wizard.

# • Export button

The **Export** button allows the user to export the list of selected users. The user will first select a set of users and click the **Export** button. When the user clicks the **Export** button, Figure 8-39 displays.

Figure 8-39 Save As - Export Users



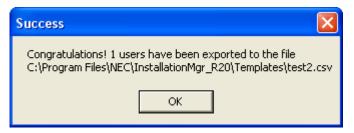
The **User Export** function exports all the information on the Edit User dialog. The following information items listed are:

- Last Name
- First Name
- Phone Name Display
- Organization
- Location
- Phone Model
- Class Template Name
- Station Number
- Button Template Name
- Call Forwarding Template Name
- Accessories Template Name
- Voice Mail Template Name

- Pickup Group Name
- Hunt Group Name
- Jack ID
- Old Phone Number

After the export is complete, Figure 8-40 displays.

Figure 8-40 Success - Export User





When importing from the results of an export operation, there will be some information that will need to be specified upon re-importing. Specifically the template information is exported but will not be re-used on import. The user will need to specify a default template for each template as the users are imported.

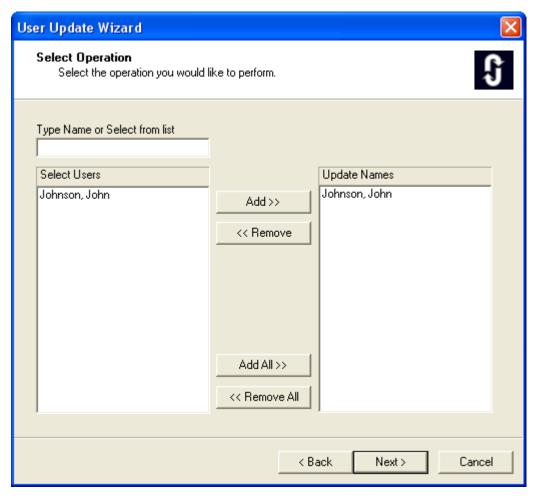
# • **Update Wizard** button

Figure 8-41 User Update Wizard - Welcome to Installation Manager User Update Wizard



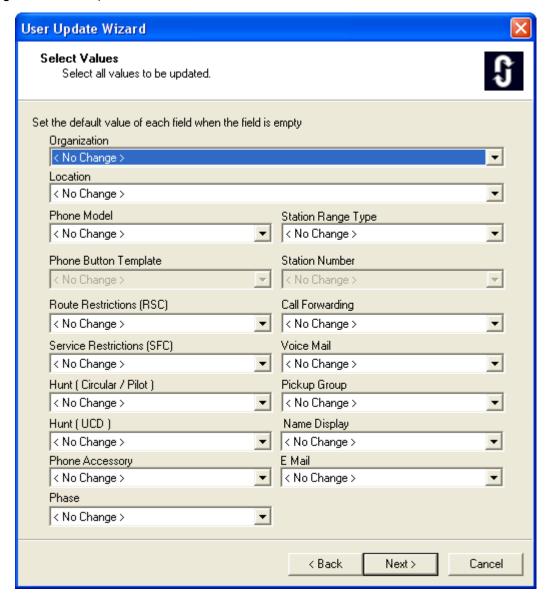
Step 13 Click the Next button to proceed. Figure 8-42 displays.

Figure 8-42 User Update Wizard - Select Operation



Step 14 Select the user records to update using the Add, Remove, Add All, or Remove All buttons, then click the Next button to proceed. Figure 8-43 displays.

Figure 8-43 User Update Wizard - Select Values

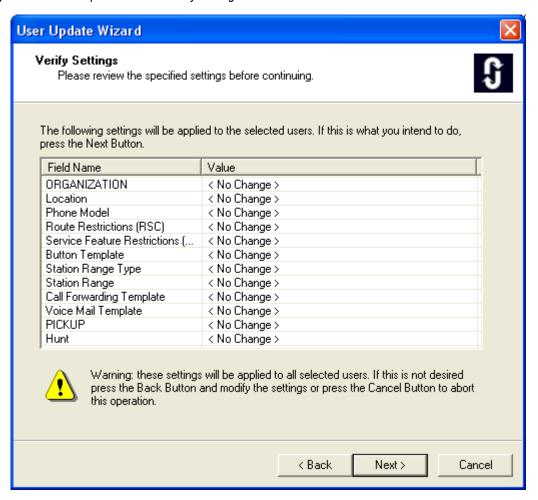


**Step 15** Set the default value of each field. Click the **Next** button to proceed. Figure 8-44 displays.



If a user selects a phone model with no button layout (Analog, SIP, etc.), the Button Template combo box will change to **<Clear>**.

Figure 8-44 User Update Wizard - Verify Settings



**Step 16** Review the settings specified. If satisfied with the values, click the **Next** button to continue. Figure 8-45 displays.

Finish

Cancel

< Back

Completing the User Update Wizard

Congratulations. You have successfully Completed the User Update Wizard. The results of this operation are shown below.

You have successfully updated 1 records

Figure 8-45 User Update Wizard - Completing the User Update Wizard

Step 17 Click the Finish button.

9

# **Group Assignments**

This chapter describes the MA4000 Installation Manager's **Group Assignments** section (Figure 9-1).

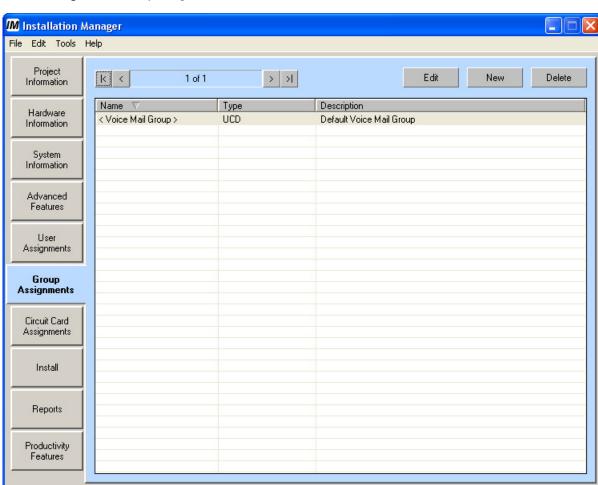


Figure 9-1 Group Assignments

#### • Edit button

The user will select a group from the list box, then select the Edit button. This will allow the user to edit that hunt group. The dialog that is displayed (see Figure 9-2 and Figure 9-3) will depend on the hunt group selected.

# • Edit Pickup Group

Figure 9-2 Edit Pickup Groups Template - General

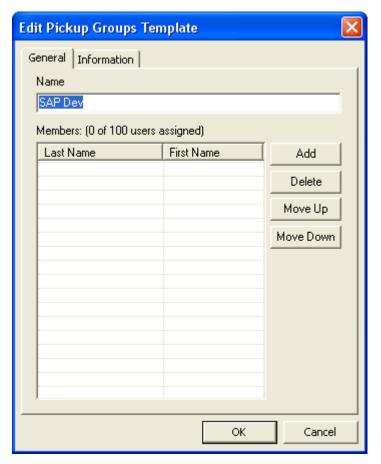
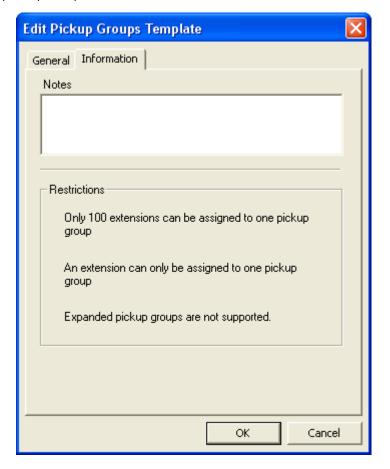


Figure 9-3 Edit Pickup Groups Template - Information



#### • New button

When the user selects the **New** button, Figure 9-4 displays.

Figure 9-4 Select Users - New Group



**Step 1** Use the radio buttons to select the appropriate Group Type, then click the **OK** button.

- —When the **Hunt Group Circular** type is selected, Figure 9-5 and Figure 9-6 tab screens display.
- —When the **Hunt Group Pilot** type is selected, Figure 9-7 and Figure 9-8 tab screens display.
- —When the **UCD Group** type is selected, Figure 9-9 and Figure 9-10 tab screens display.
- —When the Pickup Group type is selected, Figure 9-11 and Figure 9-12 tab screens display.



The minimum number of entries for a Group is 2.

Figure 9-5 New Hunt Group - Circular Template - Group

Restrictions
The maximum numbers within a Circular Hunt group is 100.

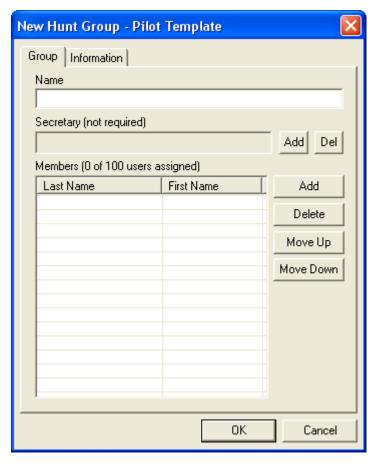
A member assigned to a UCD or Pilot Hunt group may not be assigned to a Circular Hunt group.

Once assigned to a Circular Hunt group, a member of this hunt group may not reside in either a Pilot or a UCD Hunt group.

Secretaries are not counted as one of the 100 allowed members per group. A maximum of 255 hunt groups can be overflowed to the same secretarial extension.

Figure 9-6 New Hunt Group - Circular Template - Information

Figure 9-7 New Hunt Group - Pilot Template - Group





The same secretary may be included in multiple groups (the multiple secretary feature). The secretary can not be a member of Pilot or Circular Hunt Groups.

Group Information

Notes

Restrictions
The maximum number of members within a Pilot Hunt group is 100.

A member assigned to a UCD or Circular Hunt group may

Once assigned to a Pilot Hunt group, a member of this hunt group may not reside in either a Circular or a UCD

Secretaries are not counted as one of the 100 allowed members per group. A maximum of 255 hunt groups can be overflowed to the same secretarial extension.

OΚ

Cancel

Figure 9-8 New Hunt Group - Pilot Template - Information

Hunt group.

Figure 9-9 New UCD Group Template - Group

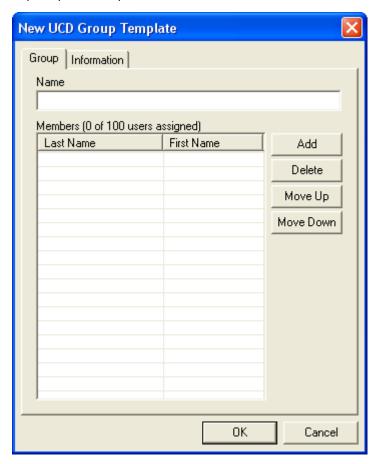


Figure 9-10 New UCD Group Template - Information

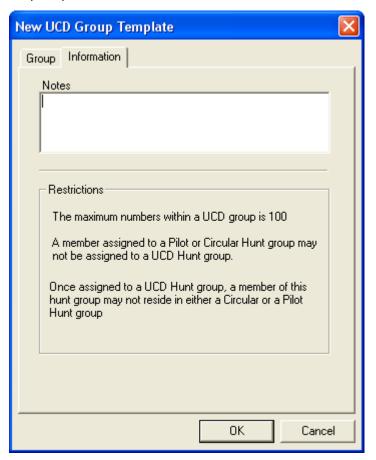
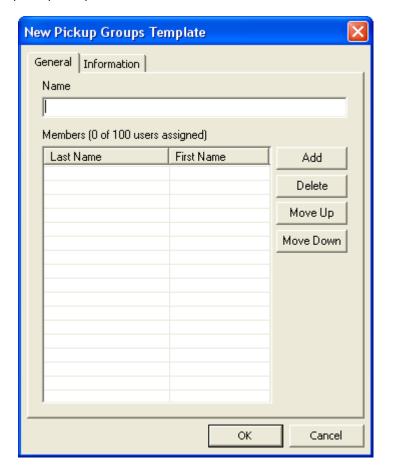


Figure 9-11 New Pickup Groups Template - General



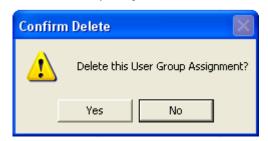
Restrictions
Only 100 extensions can be assigned to one pickup group
An extension can only be assigned to one pickup group
Expanded pickup groups are not supported.

Figure 9-12 New Pickup Group Template - Information

### • Delete button

The user first selects a hunt group to delete, then clicks the **Delete** button. Figure 9-13 displays.

Figure 9-13 Confirm Delete - Delete This User Group Assignment



10

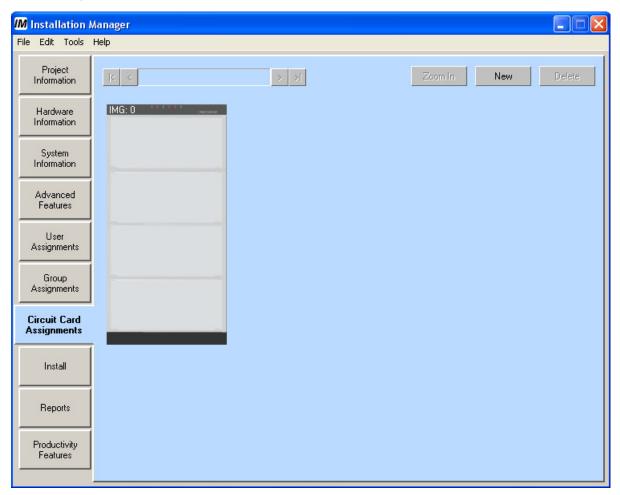
# **Circuit Card Assignments**

This chapter describes the MA4000 Installation Manager's **Circuit Card Assignments** section (Figure 10-1).



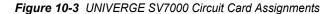
Right-clicking an existing or blank circuit card assignment slot causes a dialog box to display providing you the ability to edit or delete an existing assigned chassis, or assign a new Virtual chassis.

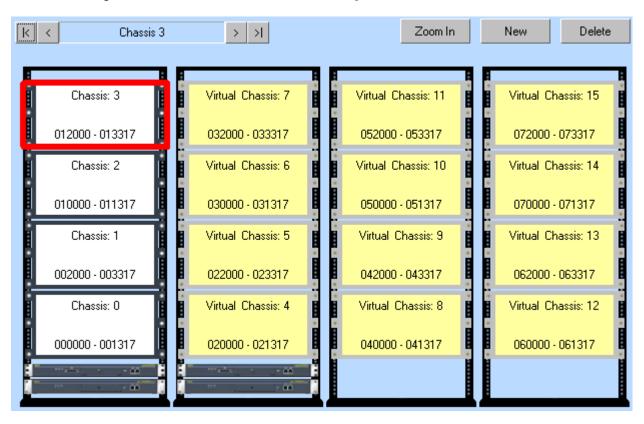
Figure 10-1 Circuit Card Assignments Tab



K < PIM 15 > |>| Zoom In New Delete IMG: 0 IMG: 1 IMG: 3 PIM: 15 PIM: 3 PIM: 7 Virtual PIM: 11 012000 - 013317 032000 - 033317 052000 - 053317 072000 - 073317 PIM: 2 Virtual PIM: 6 PIM: 10 PIM: 14 010000 - 011317 030000 - 031317 050000 - 051317 070000 - 071317 PIM: 1 Virtual PIM: 5 PIM: 9 Virtual PIM: 13 022000 - 023317 002000 - 003317 042000 - 043317 062000 - 063317 PIM: 12 PIM: 0 PIM: 4 Virtual PIM: 8 000000 - 001317 020000 - 021317 040000 - 041317 060000 - 061317

Figure 10-2 NEAX IPX / IPX DM / UNIVERGE IPX Circuit Card Assignments





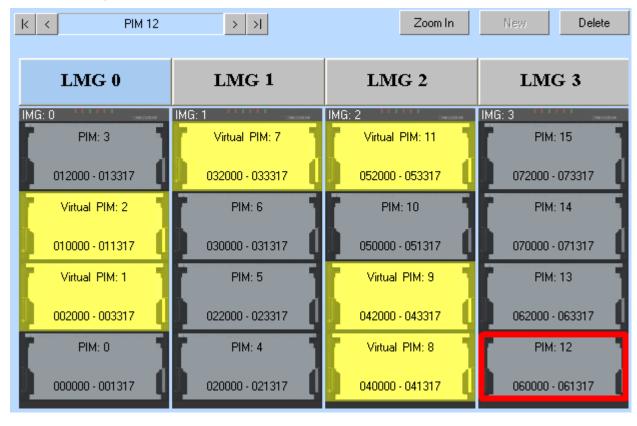


Figure 10-4 NEAX IPX UMG Circuit Card Assignments

### **Creating a New Circuit Card Assignment (UMG)**

An Ultra Module Group (UMG) system contains up to four Local Module Groups (LMGs), each of which can contain up to four Interface Module Groups (IMGs) and 16 Peripheral Interface Modules (PIMs).

To create a new circuit card assignment, do the following:

- **Step 1** Launch Installation Manager. The Startup dialog displays.
- Step 2 Click the Projects tab, if necessary.
- **Step 3** Click a project in the list, then click **OK**. The Installation Manager main window displays.
- **Step 4** Click the **Circuit Card Assignments** tab. A graphic outline representation of your system displays.
- **Step 5** Click a location to select where you wish to add a PIM.
- Step 6 Click New. The New Chassis dialog displays (see Figure 10-8).
- Step 7 Click a radio button to specify whether you are defining a physical (9U or 6U) or virtual chassis (PIM), then click OK. A blank chassis (PIM) displays in the system outline.
- **Step 8** Double-click the on-screen, or click **Zoom In**. A detailed view of the chassis's slots displays.

- Step 9 Click in the diagram or use the Slot drop-down menu to select a slot you wish to configure (see Figure 10-7).
- Step 10 Use the Card drop-down menu to select the card you wish to configure in the selected slot. If the card must be configured with additional parameters, the Edit Circuit Card dialog displays (see "Setup IP... button" on page 5-5).



You can also right-click a particular a slot in the diagram to display a pop-up menu, select the **Insert Card** option, then select the desired card from the displayed list.

**Step 11** Complete the Edit Circuit Card dialog with the appropriate values for the card you are adding.



If you are configuring a physical protocol handler card refer to the following field descriptions. Some options may not be available, based on the type of MG card you wish to configure:

- Name Device name
- · Route Count Number of the route that will be created for this device
- · Data Ch. Route Name The B-channel name



If you are configuring a trunk card refer to the following descriptions:

- Name Device name
- · Default Gateway Address IP address of your network's gateway router
- DRS Address IP address of the Device Registration Server
- IP Address Device IP address. Each media gateway must have a separate IP address
- Network Mask Device IP network mask
- **Step 12** Click **Zoom Out** to return to the large-scale system view.
- **Step 13** (Optional) Repeat Steps 5-12 for any additional circuit cards you wish to assign.

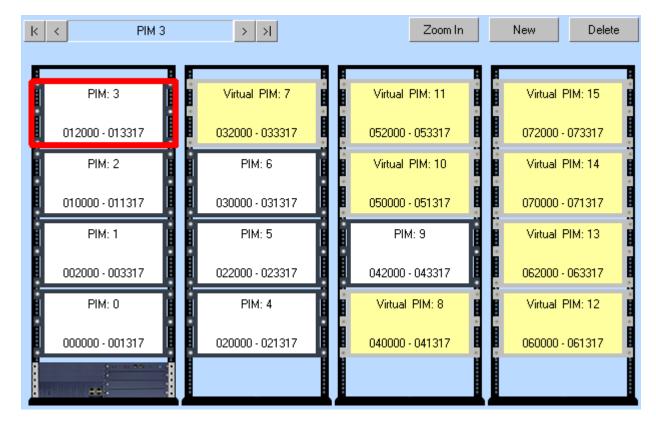
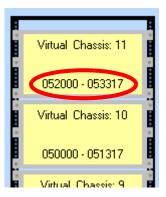


Figure 10-5 UNVERGE SV8500 Circuit Card Assignments

The Chassis LEN numbers (see Figure 10-6) are based on the information provided by the user when the "Create Project Wizard" on page 3-7 is performed. Specifically, the number of ports selected in the **System Maximum Capacity** field (see Figure 3-10, "Create Project Wizard - Project Name and Type - NEAX IPX and NEAX IPX DM" on page 3-7).

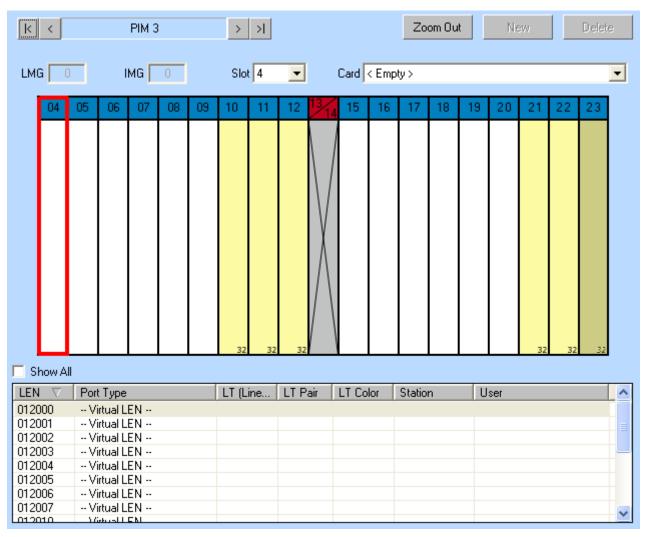
Figure 10-6 Chassis LEN Number



### • Zoom In button

When the **Zoom In** button is clicked, Figure 10-7 displays.

Figure 10-7 Circuit Card Assignments - Edit Chassis





You can not insert, edit, or delete a circuit card in slot #23.



Right-clicking any circuit card slot allows you to delete or edit an existing assigned circuit card, or insert a new circuit card by selecting it from the Insert Card pop-up menu.

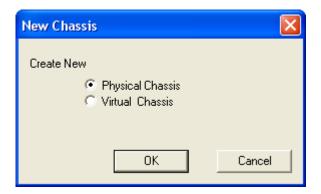
### • Zoom Out button

Clicking the **Zoom Out** button returns you to Figure 10-2, Figure 10-3, or Figure 10-4.

### • New button

When the **New** button is clicked, Figure 10-8 displays.

Figure 10-8 New Chassis



 Select the **Physical Chassis** or **Virtual Chassis** option button to add the desired PIR to the Circuit Card Assignments panel.

### • **Delete** button

To delete an existing Virtual Chassis from the Circuit Card assignments, click the **Delete** button. Figure 10-9 displays.

Figure 10-9 Warning - Delete Virtual Chassis

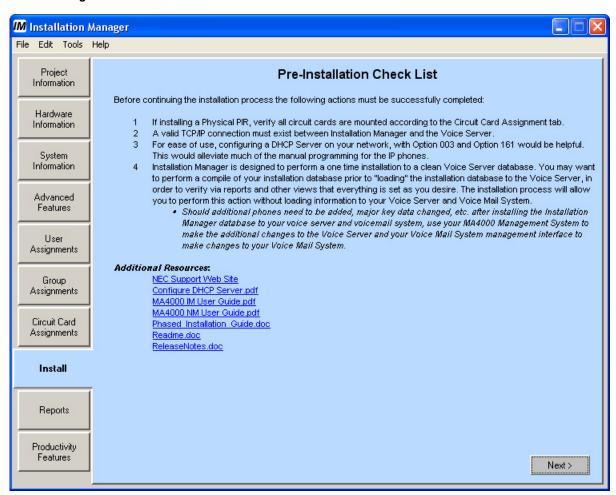


11

## Install

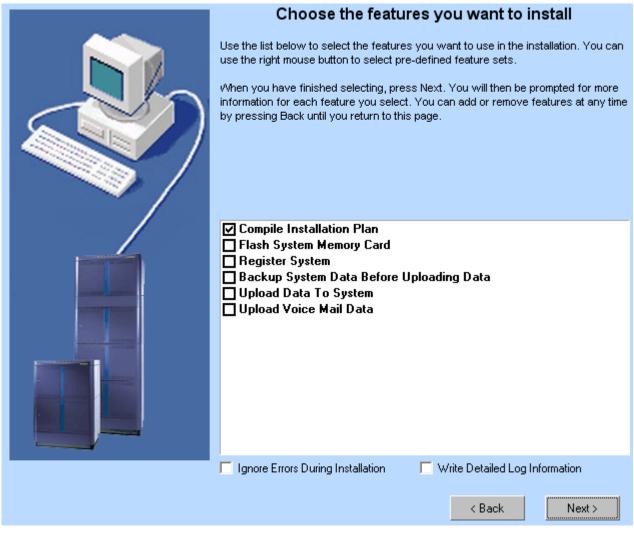
This chapter describes the MA4000 Installation Manager's **Install** section (Figure 11-1).

Figure 11-1 Pre-Installation Check List



- **Step 1** Ensure all the actions listed in the checklist are completed before continuing with installation.
- Step 2 Click the Next button to proceed. Figure 11-2 displays.

Figure 11-2 Choose the Features You Want to Install





The device type displayed in Figure 11-2 is dependent on the system selected. For example, the UNIVERGE SV8500 options are:

Compile Installation Plan	
Register System	
■ Backup System Data Bef	ore Uploading Data
Upload Data To System	
☐ Unload Voice Mail Data	

- Step 3 Select the features to use during installation.
  - —Compile Installation Plan
  - —Flash System Memory Card (SV8500 not supported)
  - -Register System
  - -Backup System Data Before Uploading Data
  - —Upload Data To System
  - -Upload Voice Mail Data
- Step 4 Click the Next button to continue. Figure 11-3 displays for the UNIVERGE SV7000. In the Select Installation Phase drop-down field, choose the phased installation desired. Use the checklist on the dialog box to ensure all restrictions are followed when using a phased installations.



The Phased Installation Check List dialog box (Figure 11-3) will not display if the phased installation was not selected.



Click the **Phased Installation Guide** hyperlink for additional information on this procedure. A Microsoft Word document will display.

Figure 11-3 Phased Installation Check List

## Phased Installation Check List The following restrictions must be observed when using phased installations: Phase 1 (i.e. "User Data + Hardware Installation") installations must be performed on a clean initial Voice Server It is recommended that all Voice Server PIMs/PIRs, Circuit Cards, Media Gateways, Protocol Hander (PH), and Signaling Servers are mounted in phase 1. Mounting additional hardware in later phases may have unpredictable Changing Voice Server Fusion type (NCN/LCN) or Fusion Point code between phases is not permitted. Additional updates and changes may be added using the MA4000 Management System or the MAT Tool between installation phases. Phase 2 and higher installations requires synchronization with the Voice Server before completing the compile Additional Resources: Phased Installation Guide Select Installation Phase Phase 1 User Data + Hardware Installation • Name Type Internal PHD INT PHD < Back Next>

Step 5 Click the **Next** button to proceed. Figure 11-4 displays providing the progress status throughout the compiling process. It provides the status of what is currently being compiled, a list of warnings, and a list of errors.

Figure 11-4 Compile User Phone Assignments Progress

# Compiling Installation Plan... Assigning Phone Button Data... Compiling Installation Plan. Removing Old Installation Plan... Removing Old Installation Plan... Compiling Installation Plan... Reserving system ports... Assigning Reserved Phone Numbers... Reserved Phone Numbers Reserved Stations Assigned 0 Assigning Manual Phone Numbers... Manual Station Numbers Stations Assigned 0 Assigning Conference Station Numbers... Conference Station Numbers Stations Assigned 0 Cancel

—If an error is encountered during the compiling process, Figure 11-5 displays.

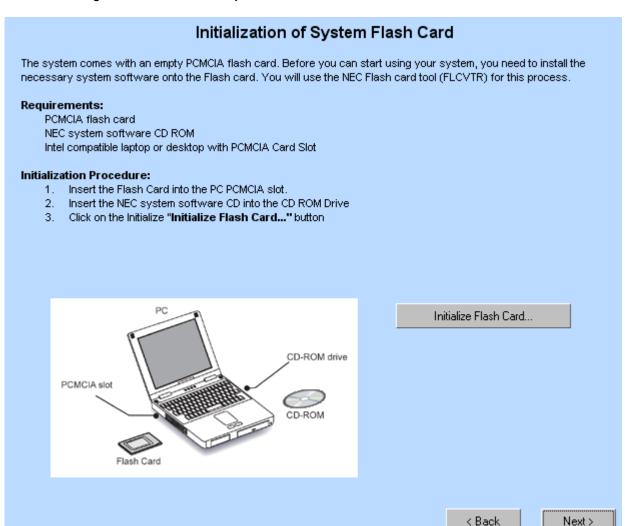
Figure 11-5 Installation Warning - Stop Installation Query



- —Select the **Yes** button to halt the installation immediately.
- —Select the **No** button to ignore the error encountered and continue.
- —Select the No to All button to ignore this error and others encountered.

Step 6 When the compiling process finishes, Figure 11-6 displays.

Figure 11-6 Initialization of System Flash Card





UNIVERGE SV8500 is not supported.



The flash card installation needs to be installed using the MPS System CD-ROM.

**Step 7** To initialize a System Flash Card:

- -Insert the Flash Card into the PC PCMCIA slot.
- -Insert the SV7000 software CD into the CD-ROM drive.
- —Click the Initialize Flash Card ... button.

—When complete exit the program. Figure 3-31 and Figure 11-7 or Figure 11-8 displays.



When Figure 3-31 displays, perform the steps necessary to proceed with SV7000 installation.

Figure 11-7 Installing SV7000 Flash Card

### Installing SV7000 Flash Card

This section explains the procedure to initially startup SV7000T. Prepare the Flash Card containing required program and software for the SV7000T side. Note: your SV7000S side was prestaged before shipping.

### Installation Procedure:

- Remove the front cover using a Phillips screw driver.
- 2. Set the switches on the front panel referring to the settings below.
- 3. Set the SENSE wheel to position "2".
- Firmly insert the prepared Flash Card into each PC card slot of SV7000T.
   Take notice not to mix up the Flash Card for SV7000T.
- 5. Power up system.

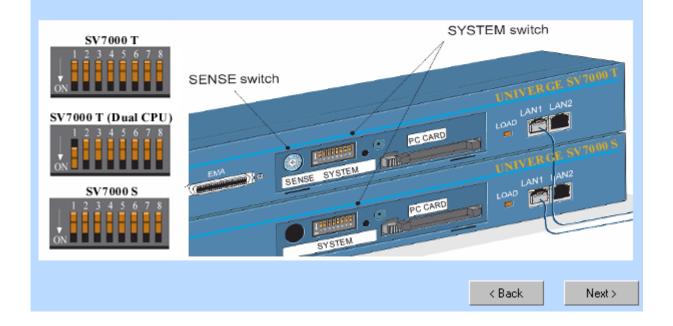


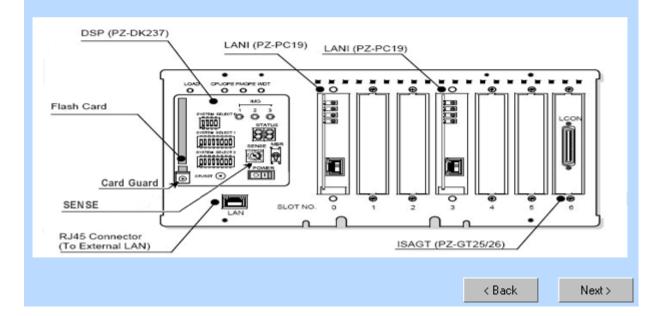
Figure 11-8 Installing IPX Flash Card

### Installing IPX Flash Card

This section explains the procedure to initially startup NEAX IPX. Prepare the Flash Card containing required program and software for the IPX.

### Installation Procedure:

- 1. Remove the front cover using a Phillips screw driver.
- 2. Set the SENSE wheel to position "2".
- 3. Firmly insert the prepared Flash Card into the Flash Card slot.
- 4. Place the card guard in the up position.
- 5. Power up system.



- **Step 8** Follow the installation procedures listed.
- **Step 9** When the system is powered up, click the **Next** button. Figure 11-13 displays.

Figure 11-9 System Software Registration

# System Software Registration All new Voice Server systems need to be registered with NEC. The registration process will activate the Voice Server system. The NEC Registration tool will collect customer information and then contact NEC's Registration Server to get the license key required to activate the Voice Server. Requirements: Install System Software. Refer to the system installation manual for instructions. Internet Connection or Modern with external phone Line Register System... PC Internet Registration Registration Server Registration Reserver

**Step 10** Activate the registration process by clicking the **Register System** button.



See "If the Initial Installation Execute button is clicked, Figure 3-32 displays." on page 3-26 for the steps required to collect the customer information, contact NEC's Registration Server, and obtain license key required to activate the SV7000.

Step 11 When the Registration Wizard process finishes, Figure 11-10 displays.

Figure 11-10 Backup/Restore Voice Server Data Memory

ecommended that you perform a system back em data memory area's to backup.	up/restore at this time. Choose the appropriate option below and then s
en finished click on the next button.	
C Skip System Backup/Restore	
<ul> <li>Backup System Data Memory ont</li> </ul>	o PBX Hard Drive
Hard Drive backup to preserve the exis	ing program data in case of installation upload failure.
PBX Data Areas	✓ Name Display
✓ Data Memory	✓ Name Display ✓ ACD Data Memory
	✓ Name Display ✓ ACD Data Memory
✓ Data Memory ✓ Wireless Call Forwarding	
<ul><li>✓ Data Memory</li><li>✓ Wireless Call Forwarding</li><li>✓ One Touch Speed Calling</li></ul>	
✓ Data Memory     ✓ Wireless Call Forwarding     ✓ One Touch Speed Calling     ✓ PBX Local Processor (LP) Data Areas —	ACD Data Memory
✓ Data Memory     ✓ Wireless Call Forwarding     ✓ One Touch Speed Calling     ✓ PBX Local Processor (LP) Data Areas —     ✓ Call Forwarding	CD Data Memory ✓ Logout Transfer
✓ Data Memory     ✓ Wireless Call Forwarding     ✓ One Touch Speed Calling     ✓ PBX Local Processor (LP) Data Areas –     ✓ Call Forwarding     ✓ User Key Assignment	✓ Logout Transfer  Number Sharing

**Step 12** Select the type of backup to perform then select the **Next** button. Figure 11-12 displays.

Figure 11-11 Media Gateway Setup

One or more Media Gateways have been configured.

If you have not already done so, you must do the following:

In the Hardware Information / Media Gateway & Circuit Cards tab select each Media Gateway device and then click the Setup ING... button and follow the directions.

Insure that all Media Gateways are connected to the network.

NOTE: Failure to configure these devices may render the voice system inoperable and may require additional programming using the MAT.

Click the Next > button to continue installation

**Step 13** Ensure each Media Gateway has been configured and connected to the network, then select the **Next** button. Figure 11-12 displays.



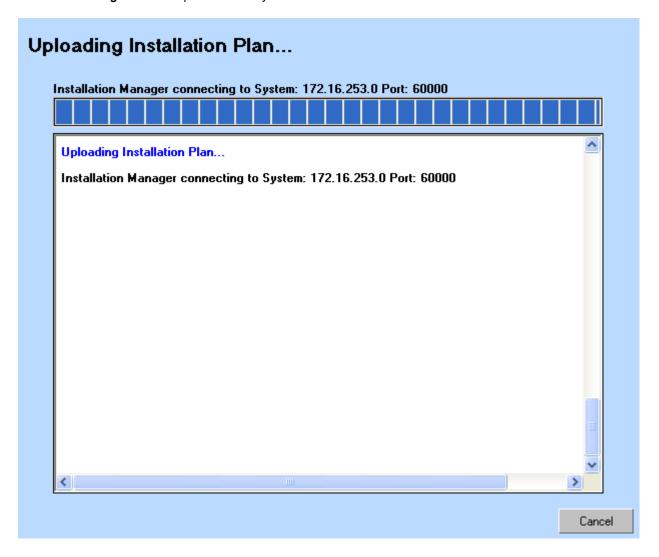
The Media Gateway Setup dialog box will not display if there is no Media Gateway circuit card inserted.

< Back

Next>

Install

Figure 11-12 Upload Data to System



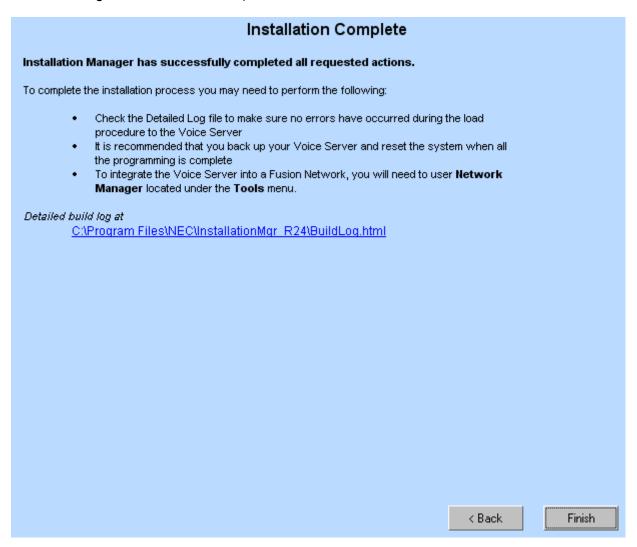
Step 14 After the installation plan upload finishes, Figure 11-13 displays.

Figure 11-13 Voice Mail Server Setup

# 1. Update information under the Hardware Information/ Voice Mail section in Installation Manager. 2. Insure that the server is connected to the network. 3. Test for successful connection. 4. Insure that the templates are defined in the voice mail server. 5. Click the Next > button in Installation Manager to upload mailbox data to the voice mail server.

Step 15 Click the Next button. Figure 11-14 displays.

Figure 11-14 Installation Complete



Step 16 Click the Finish button to complete the installation process.

# 12

# Reports

This chapter describes the MA4000 Installation Manager's **Reports** section (Figure 12-1).

The user will be able to print several useful reports. Many reports won't be meaningful or useful until the information has been compiled. If there is not sufficient information when a report is launched the user will see a blank report.

Figure 12-1 Reports - General Tab

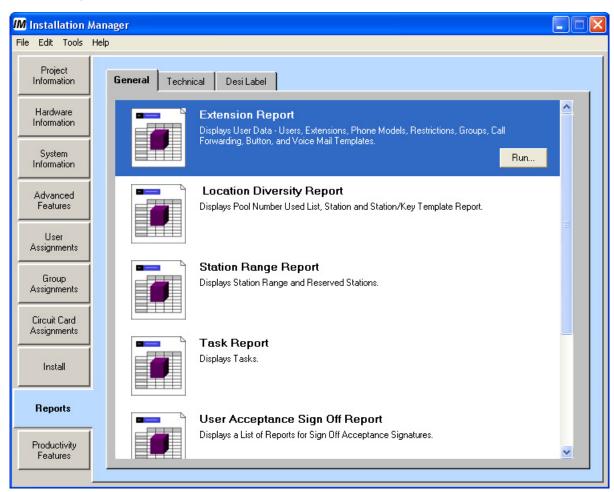


Table 12-1 lists all the reports available and provides a brief description of each.

### **Creating and Printing a Report or DESI Label**

- **Step 1** Click a report to select it, then click **Run**. The report dialog displays.
- **Step 2** Click a radio button, drop-down list, or check box to specify the report's scope, then click **OK**.



The options available varies with each report.

Installation Manager creates the report and displays it in a new window.

Table 12-1 Description of Reports

	General Tab Reports		
Extension Report	Displays User Data - Users, Extensions, Phone Models, Restrictions, Groups, Call Forwarding, Button, and Voice Mail templates.		
Location Diversity Report	Displays Pool Number Used List, Station and Station/Key Template Report.		
Station Range Report	Displays Station Range and Reserved Stations.		
Task Report	Prints a report of all tasks for a project.		
User Acceptance Sign Off Report	Prints information to be used by CSR to obtain the customers acceptance of the user and phone configuration. User selects which reports to include: Extension Detail, Extension Summary, Groups, Voice Mail Report.		
Voice Mail Report	Detail and Summary reports. Prints Mailboxes defined, extensions associated to, templates assigned.		
Technical Tab Reports			
Call Forwarding Report	Displays Call Forwarding Data - Users, Extensions, and Templates.		
Access Codes and Speed Calling Codes Report	Displays Access Codes and Speed Calling Codes.		
Group Report	Displays Group Data - Circular Hunt, Pilot Hunt, UCD Hunt, and Rollover.		
Hardware Report	Displays Hardware Data - Circuit Cards, Phone Models, and Phone Adapters.		
Least Cost Routing and System Feature Report	Displays Least Cost Routing and System Feature Data - Local and Network LCR Patterns, Time of Day, and System Feature (ASYD).		
Phone Placement Report	Displays Phone Placement Data - Users, Extensions, Phone Models, Cord Lengths, Organizations, and Locations.		
Restriction and Feature Report	Displays Restriction and Feature Data - Route Restriction (RSC), Toll Restriction, and Service Feature Restriction (SFC).		
Technician Cut Sheet	Displays Hardware Installation Information - Extensions, IMGs, PIMs, SLOTs, and LENs.		
DESI Label Reports			
DESI Label for Series i (DTR-16D)/DtermIP (ITR-16D)	Prints Desi labels for a single user, for a range of users, or for all users.		

	I
DESI Label for Series E (DTP-16D)	Prints Desi labels for a single user, for a range of users, or for all users.
DESI Label for Series i (DTR-2D)	Prints Desi labels for a single user, for a range of users, or for all users.
DESI Label for Series E (DTP-2D)	Prints Desi labels for a single user, for a range of users, or for all users.
DESI Label for Series i (DTR-32D)/DtermIP (ITR-32D)	Prints Desi labels for a single user, for a range of users, or for all users.
DESI Label for Series E (DTP-32D)	Prints Desi labels for a single user, for a range of users, or for all users.
DESI Label for Series i (DTR-8D)/DtermIP (ITR-8D)	Prints Desi labels for a single user, for a range of users, or for all users.
DESI Label for Series E (DTP-8D)	Prints Desi labels for a single user, for a range of users, or for all users.
DESI Label for DtermIP (ITR-4D)	Prints Desi labels for a single user, for a range of users, or for all users.

13

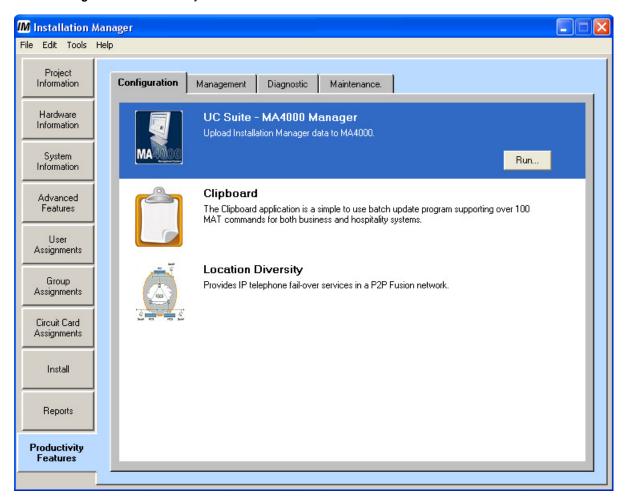
# **Productivity Features**

This chapter describes the MA4000 Installation Manager's **Productivity Features** section (Figure 13-1) tabs.

Chapter Topic

- Configuration Tab
- Management Tab
- Diagnostic Tab
- Maintenance Tab

Figure 13-1 Productivity Features Tab



The **Productivity Features** menu provides access to applications you use in conjunction with Installation Manager. These applications launch in a separate window and perform specific functions you need to configure your system properly. Some of these applications are also available from the **Tools** menu.

The **Tools** tab contains four sub-tabs:

- Configuration
- Management
- Diagnostic
- Maintenance

Some options within a tab may not display, or may not be available, based on your system type and certain options you selected during your system's installation.

### **Configuration Tab**

The Configuration tab (Figure 13-2) consists of the following applications:

• UC Suite - MA4000 Manager

Allows the user to load existing Installation Manager data to the MA4000.

Clipboard

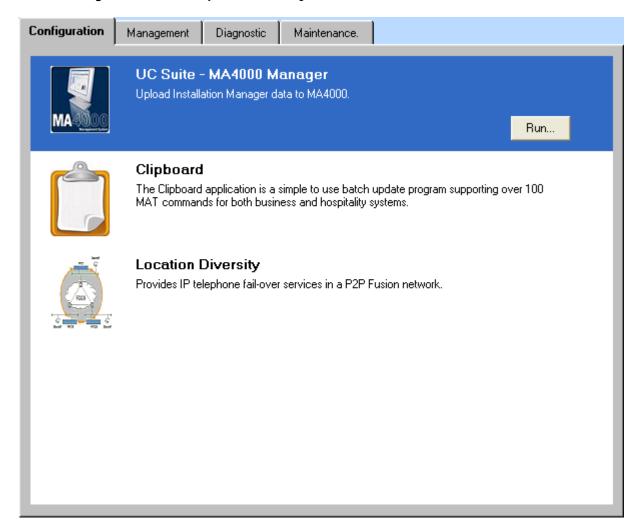
Provides the user with integrated access to the MAT Clipboard application (see *Clipboard...* for additional information on this option).

Location Diversity

Provides fault tolerance for IP telephones in an FCCS (Fusion) network by providing stations the ability to register with up to two back-up IP-PBX nodes in the network providing fail-over services to the physical/virtual station in the event of a communications failure between the station and its primary IP-PBX.

**Note**: While the IP terminals are under the control of a backup node, the station can continue to function until the primary node becomes available. Not all station functionality is available while it is operating on one of the backup nodes (for example, appearance, dependencies, etc.)

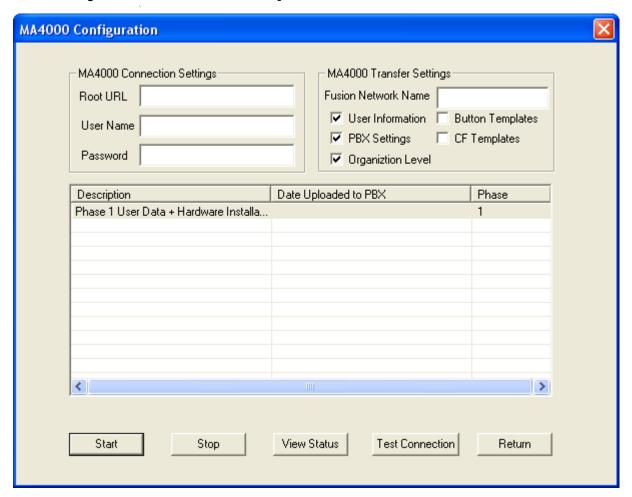
Figure 13-2 Productivity Features - Configuration Tab



### UC Suite - MA4000 Manager

Step 1 Select Tools → Configuration → UC Suite — MA4000 Manager, then click the Run button. Figure 13-3 displays.

Figure 13-3 UC Suite - MA4000 Manager



**Step 2** Enter the MA4000 connection and transfer settings described in Table 13-1.



The server information entered in this section are added to the database and used when data is transferred to the MA4000.

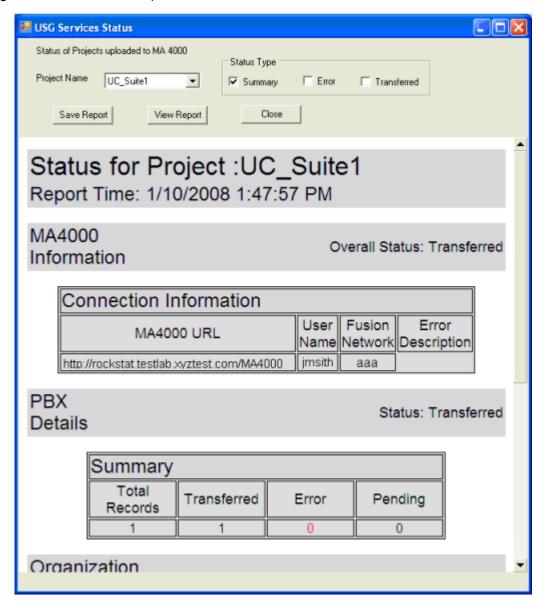
- —Click **Start** to load the Installation Manager data to a MA4000.
- —Click Stop to end the data uploading process to the MA4000 before the transfer finishes.
- —Click View Status to display a dialog showing detailed progress information about the current transfer. See Figure 13-4.
- —Click Return to return to the Tool's Configuration tab.
- —Click Test Connection to ensure the MA4000 connection settings (for example, Root URL, etc.) are correct and MA4000 is running properly.

—Click **Return** to close the MA4000 Configuration dialog. This selection does not stop a current upload in progress.

Table 13-1 MA4000 Configuration Connection and Transfer Settings

Field	Description
MA4000 Connection Settings	
Root URL	Enter the URL address for the MA4000 (for example, http:// <host name="">/MA4000).</host>
User Name	Enter the MA4000 user name to connect to the MA4000 web services.
Password	Enter the MA4000 password to connect to the MA4000 web services.
MA4000 Transfer Settings	
Fusion Network Name  IM MA4000	Enter the Fusion Network Name of which the PBX is a part.
$\vdash$ NCN $\longrightarrow$ Edit $\rightarrow$ OK	If the Fusion Network Name does not match the MA4000 database, and the Fusion Point code is a NCN, then create a new Fusion Network and add the PBX.
New → Create ←	<ul> <li>If the Fusion Point code is a LCN, an error will return indicating the Fusion Network does not contain a NCN / No Fusion Network Found.</li> </ul>
-LCN — Edit → OK — New → Error	• If the Fusion Network Name does match the MA4000 database, and the Fusion Point Code is a NCN, then if the PBX details match the NCN node in the MA4000 Fusion Network, a PBX Def ID of the existing PBX is returned. Otherwise, an error displays indicting the Fusion Network already contains a NCN.
	If the Fusion Point code is a LCN, then the PBX needs to be added to the matching Fusion Network as a LCN node.
Stand-alone	If the Fusion Network is standalone, then create a PBX.
PBX Settings	Select to ensure the transfer of the PBX settings to the MA4000.
User Information	Select to ensure the transfer of the user information. See <i>User Assignments</i> .
	<b>Note:</b> The transfer of the <b>PBX Settings</b> option is automatically selected if this option is selected.
Organizational Level	Select to ensure the transfer of the Organizational level information. See <i>User Assignments</i> .

Figure 13-4 View Status Example

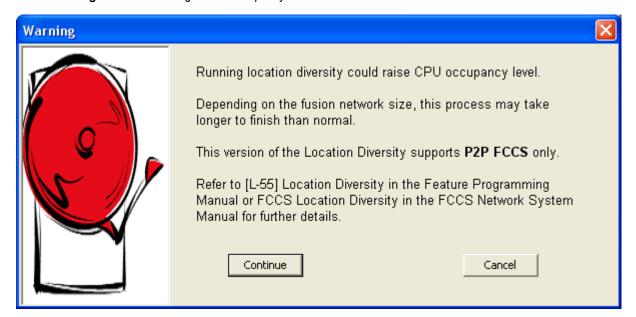


## **Location Diversity**

Location Diversity allows you to register an IP telephone with up to two backup nodes when operating in a Fusion (FCCS) network. If the telephone is unable to communicate with its primary IP-PBX, the telephone automatically connects to one of the designated backup nodes. The telephone can continue operating under the backup node until the primary node becomes available. While connected to a backup node, some node-specific features, such as appearances and dependencies, are not available.

Step 1 Select Tools → Configuration → Location Diversity, then click the Run button. The Figure 13-5 warning dialog displays.

Figure 13-5 Warning - CPU Occupancy Level



**Step 2** Read the warning information then click **Continue**.



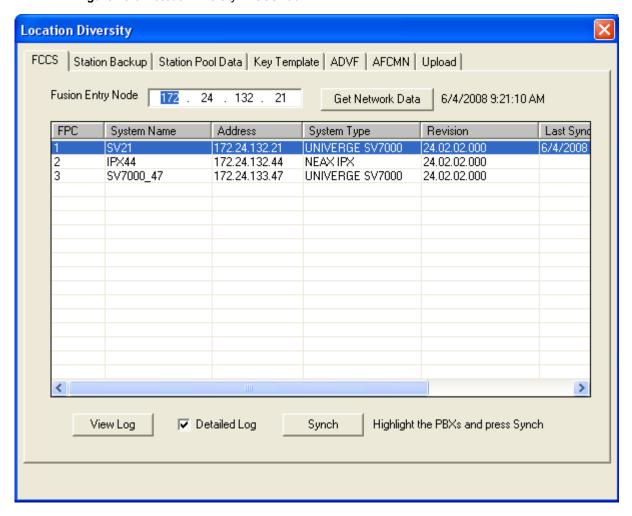
The IP Address is defined in Connect Type section. See Hardware Information.

# **Location Diversity - FCCS Tab**

Before you can begin configuring Location Diversity you must scan your Fusion network so Installation Manager can save node information to its database. Installation Manager saves the following node information:

- Extension
- TEC
- LEN
- Station Pool
- Station Backup
- Key Template

Figure 13-6 Location Diversity - FCCS Tab



Step 2 In the FCCS tab, enter the IP address of your Fusion network's entry point in the Fusion Entry Node field, then click Get Network Data.

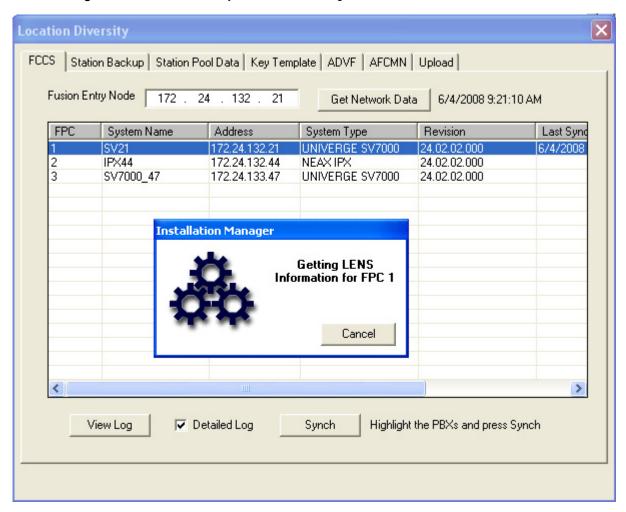
—Installation Manager scans your network and displays a list of its nodes. For each node, the list displays the date and time it was last synchronized (if any).



The **Get Network Data** option allows Installation Manager to retrieve the current NDM data (for example, a list of backup stations, pool data, key template data, etc.).

Step 3 Select the node you wish to synchronize and click the **Synch** button. Figure 13-7 displays.

Figure 13-7 Location Diversity - FCCS Tab - Getting Location Data





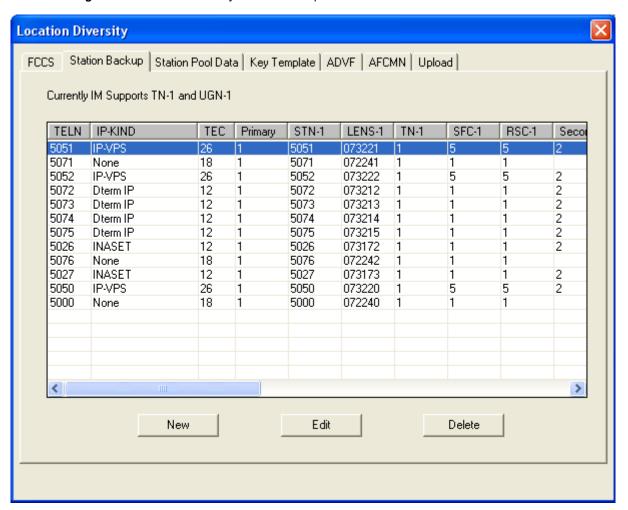
Access to the Location Diversity feature tabs are blocked during the synchronization process.

—After successful synchronization, the Extensions, TEC, LENS, Station Pools, Station Backup and Key Templates are saved in the database. See Figure 13-8.

# **Location Diversity - Station Backup Tab**

Selecting the **Station Backup** tab (Figure 13-8) results in a table listing the existing backup nodes for visiting stations.

Figure 13-8 Location Diversity - Station Backup Tab



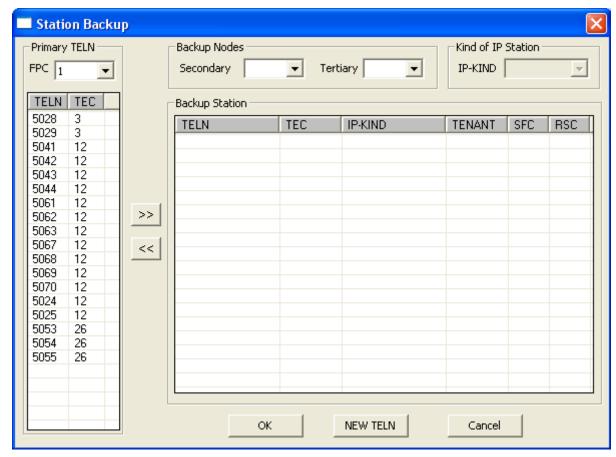
## Designating Primary, Secondary, and Tertiary Backup Stations



Users can select multiple Primary stations and assign them to the list.

Step 1 To designate Primary, Secondary, and Tertiary stations, click New. Figure 13-9 displays a list of existing backup stations.

Figure 13-9 Location Diversity - Designating Backup Stations





The TELNs listed in the **Primary TELN** section shown in Figure 13-9 only display when a PBX Fusion Point Code is selected from the **FPC** drop-down menu.

- Step 2 Use the FPC drop-down menu to select the Fusion Point Code of the PBX containing the station you wish to configure for Location Diversity.
- Step 3 Select the primary stations (multiple stations can be selected) from the TELN/TEC list, then click >> to add it to the Backup Station section.
  - Installation Manager's location diversity automatically finds the available pool numbers. If pools are not available, Location Diversity creates new pools.

- Step 4 Click the backup stations (multiple stations can be selected) in the list to select it, then use the IP-KIND drop-down menu to specify whether the backup station is a Dterm IP, SIP phone, etc.
- Step 5 Click the Secondary drop-down menu to specify the PBX to which the selected station will attempt to connect if communication with the primary PBX fails.
- **Step 6** (Optional) Click the **Tertiary** drop-down menu to specify the PBX to which the selected station will attempt to connect if communication with both the primary and secondary PBXs fails.
- **Step 7** (Optional) Click **New TELN** to create a new extension number for the backup station.



Use only if there is no TELN number listed in the Primary TELN section.

- Step 8 Click **OK** to accept the assignments.
  - —The new backup station displays in the list with a green background, indicating the data has not yet been uploaded to the PBX.

#### **Editing Existing Backup Stations**

The editing process allows the Installation Manager user to modify the following:

- Pool Number
- Tenant
- SFC
- RSC
- Name Display
- Key Template
- MAC Address
- Step 1 Use the FPC drop-down menu to select the Fusion Point Code of the PBX containing the station you wish to edit.
- Step 2 Click a station in the TELN/TEC list, then click Edit. Figure 13-10 displays

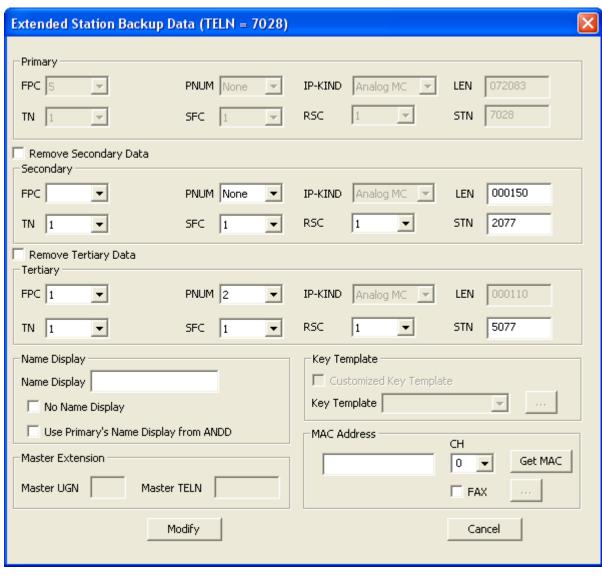


Figure 13-10 Location Diversity - Extended Backup Data

- **Step 3** (Optional) Use the **Remove Secondary Data** check box to delete existing data for the secondary backup station.
- Step 4 Use the drop-down menus in the **Secondary** pane to edit any of the following items for the selected backup station when connected to the Secondary backup PBX:
  - —FPC
  - —PNUM
  - -IP-KIND
  - -TN
  - -SFC
  - -RSC
  - -STN

- Step 5 (Optional) Use the Remove Tertiary Data check box to delete existing data for the tertiary backup station.
- Step 6 (Optional) Use the drop-down menus in the Tertiary pane to edit any of the available items for the selected backup station when connected to the Tertiary backup PBX.
- Step 7 In the Name Display pane, do one of the following:
  - —Enter a name which will display when the backup station is connected to the secondary or tertiary PBX.
  - —Select the **No Name Display** option button to specify that no name will display when the backup station is connected to the secondary or tertiary PBX.
  - —Select the Use Primary's Name Display option button to specify that the selected backup station will display its primary name when connected to the secondary or tertiary PBX.
- Step 8 Use the Key Template drop-down menu to specify which key template the backup station will use when connected to the secondary or tertiary PBX you can specify that the station will use no template, or a key template that was previously defined in the Key Template tab, or a customized template with no name.



If you choose to create a template with no name then that template applies only to the backup station you are editing and will not be available to other backup stations or listed in the Key Template tab. In essence, you are creating a "one-time-only" template.

- **Step 9** Use the **MAC Address** field to change the backup station's Machine Access Code address.
- Step 10 (Optional for TEC type 26 only) In the VPS Settings pane, use the text fields to enter the voice mail port number (VPSNO) and channel (VPSCH).
- Step 11 Click Modify to save the edited data. Installation Manager saves the edited station data and displays the station name in the status list with a blue background, signifying the data has been modified but not yet uploaded.

#### Deleting Existing Backup Stations

- Step 1 Use the FPC drop-down menu to select the Fusion Point Code of the PBX containing the station you wish to delete.
- **Step 2** Click a station in the **TELN/TEC** list to select it, then click **Delete**.
  - —A confirmation dialog displays, asking if you wish to delete all the station data.

- **Step 3** Click **Yes** to delete all the station data, or **No** to delete only the backup station from the list.
  - —The entry now displays in the backup station list with a red background, indicating the station will be deleted during the next Location Diversity data upload.
- Step 4 Use the backup station list to select a station scheduled for deletion (displaying a red background), right-click the name to display a context menu, then select **UnDelete**.
  - —The station now will not be deleted during the next Location Diversity data upload.

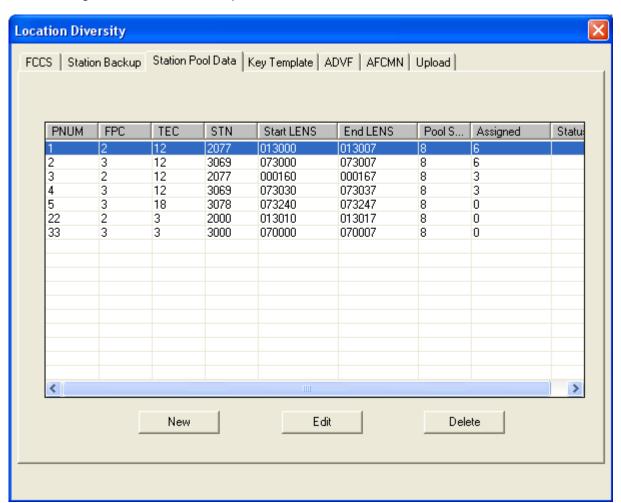
#### **Location Diversity - Station Pool Data Tab**

Installation Manager Location Diversity allows users to reserve extensions by creating station pool data. See Figure 13-11.

Installation Manager displays a list of station pool information showing the last previously synchronized pool data. You can add new pool data (if there is none existing and you configure a backup station, Installation Manager creates it automatically), edit existing data, or delete an existing entry. Station pool data includes:

- Pool Number
- FPC
- TEC Type
- Starting Station
- Starting LEN
- Size
- Ending LEN

Figure 13-11 Location Diversity - Station Pool Data Tab



The user can also add new pool data or edit/delete an existing pool. Installation Manager displays the last previously synchronized pool data in the table.

The **Status** column identifies the transaction. The fields are:

«Blank»



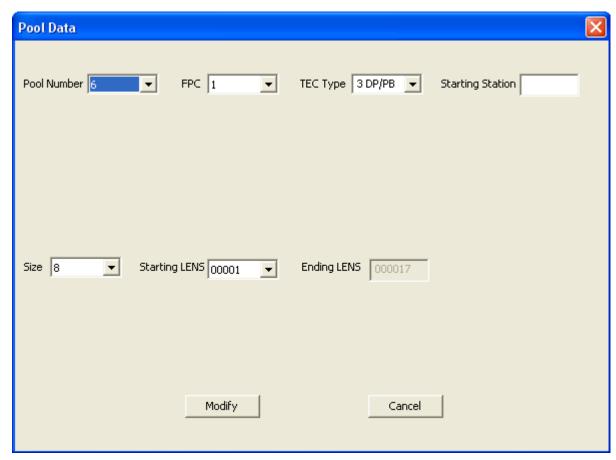
Indicates existing pool data that has not been modified/deleted.

- New
- Modify
- Delete

#### Creating New Station Pool Data

**Step 1** To create a new station pool data, click **New**. Figure 13-12 displays.

Figure 13-12 Location Diversity - Pool Data



<sup>—</sup>The **Pool Number** field is automatically assigned with the first available pool number.

Step 2 Using the FPC field, select the FPC where the pool will be created.

- Step 3 Use the **TEC Type** field to select the appropriate pool number.
  - —Installation Manager's location diversity populates the available LENS based on the TEC Type and Pool Size.
- **Step 4** Enter the beginning station of this pool in the **Starting Station** field.
- **Step 5** Select the size of the pool using the **Size** field. The size are in blocks of eight.
- **Step 6** Use the **Starting LENS** field to specify the first Line Equipment Number to assign to the pool.
  - —The Ending LENS field is automatically calculated when the Starting LENS is determined.
- Step 7 Click Modify. The information is saved to the database and the pool data status is displayed as New.

#### Editing Station Pool Data

- Step 1 Use the list to locate the data you wish to edit, then click to select it.
- Step 2 Click Edit. The Pool Data dialog displays.
- **Step 3** Use the drop-down menus and text fields to edit any of the following, as necessary:
  - -FPC
  - —TEC Type
  - —Starting Station
  - -Starting LEN
  - -Size
- Step 4 Click Modify. Installation Manager saves the edited station pool data and displays it in the status list with a blue background, signifying the pool data has been modified but not yet uploaded.

#### **Deleting Station Pool Data**

- Step 1 Highlight the desired station pool data to be deleted from the table list, then click Delete. The entry now displays in the station pool data list with a red background, indicating the data will be deleted during the next Location Diversity data upload.
- Step 2 Use the station pool data list to select a pool number scheduled for deletion (displaying a red background), then right-click the name to display a context menu. Select UnDelete. The pool data now will not be deleted during the next Location Diversity data upload.



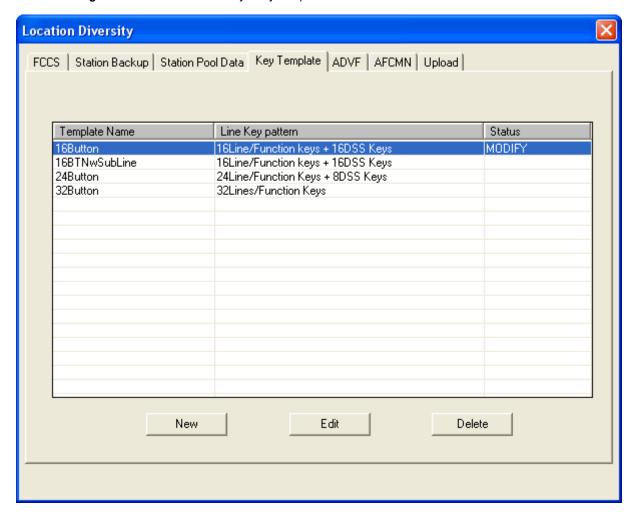
If the station pool is already being used in the Station Backup, an error message displays notifying the user of the condition. The user must delete all the Station Backups that are assigned to the pool before removing it.

—After successful verification, the row status is marked as **Delete**.

# **Location Diversity - Key Template Tab**

Installation Manager Location Diversity allows users to create new Key Templates and save the new template data to the database. See Figure 13-13.

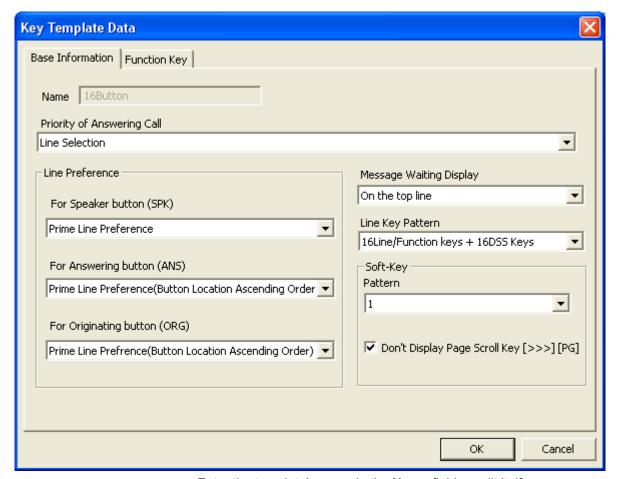
Figure 13-13 Location Diversity - Key Template Tab



#### Creating or Editing a Key Template

**Step 1** To create a new Key Template, click **New**. Figure 13-14 and Figure 13-15 display.

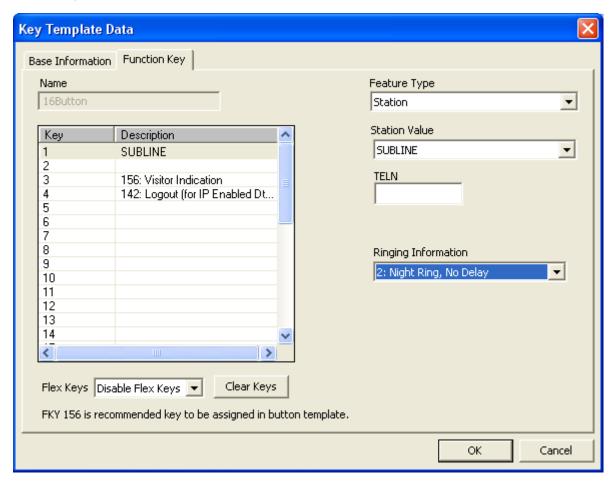
Figure 13-14 Location Diversity - Key Template - Base Information Tab



- —Enter the template's name in the **Name** field or edit it, if necessary.
- —Use the **Priority of Answering Call** drop-down menu to specify whether incoming calls should be answered based on Line Selection, Dial/Automatic/Manual Intercom lines, or a combination.
- —Use the For Speaker button (SPK) drop-down menu to specify that the SPK button selects the prime line. (Currently the only available option.)
- —Use the For Answering button (ANS) drop-down menu to specify whether the ANS button accepts the Prime Line, Incoming Line, or Ringing Line preference.
- —Use the For Originating button (ORG) drop-down menu to specify whether the ORG button accepts the Prime Line or Idle Line preference, or a combination of the two.
- —Use the Message Waiting Display drop-down menu to specify whether a message waiting indicator displays on the top or bottom line of a station's LCD display.

- —Use the **Line Key Pattern** drop-down menu to specify the number and type of key patterns assigned to the station.
- —Use the Pattern drop-down menu to specify one of 16 key patterns the station will use.
- —Use the **Don't Display Page Scroll Key [>>>] [PG]** check box to choose whether to display a Page Scroll Key [>>>] [PG] on the display.

Figure 13-15 Location Diversity - Key Template - Function Key



- —Use the **Feature Type** drop-down menu to specify whether you wish to add a Function or Station to the selected function key.
- —If you selected **Station**, use the **Station Value** drop-down menu to specify whether the station is a MYLINE, PRIMELINE, MYLINE=PRIMELINE, or SUBLINE. Options available for each are:

MYLINE Ringing Information

PRIMELINE TELN number, Restrict OG (Off Hook Suppression), and Ringing Information

MYLINE=PRIMELINE Restrict OG (Off Hook Suppression), and Ringing Information

#### **SUBLINE**

**TELN number and Ringing Information** 

If you selected **Function**, use the **Features By Name** list to select the feature you wish to assign to the selected function key. You can use the drop-down menu to limit the list to specific feature categories.

- —Use the **Flex Keys** drop-down menu to enable or disable **Flex Keys**.
- —Click the Clear Keys to remove all function key assignments.



For field information, see "User Assignments - New or Edit User" on page 8-6.



Selecting **Prime Line** enables the **Off Hook Suppression** control for the user to select.

**Step 2** Click **OK** to save the key template data.

### Deleting an Existing Key Template

- **Step** Highlight the template to be deleted, then click **Delete**.
  - —Installation Manager schedules the key template for deletion during the next Location Diversity data upload and displays the template name with a red background.
- Step 1 Use the key template data list to select a template scheduled for deletion (displaying a red background), right-click the name to display a context menu, then select UnDelete.
  - —The template now will not be deleted during the next Location Diversity data upload.

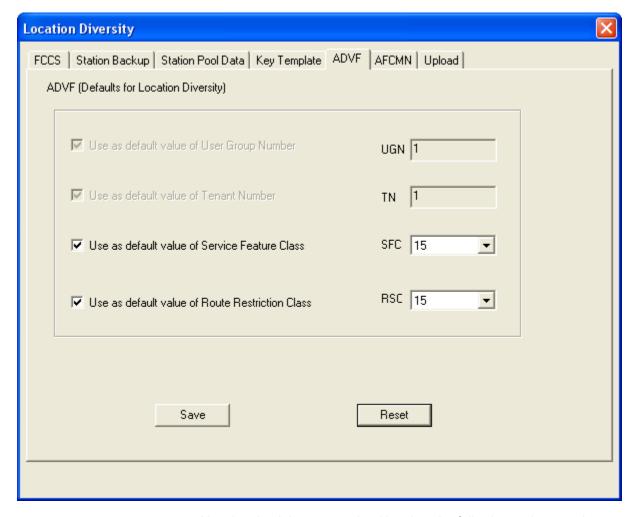
# **Location Diversity - ADVF Tab**

Assignment of Default Value for FCCS Location Diversity

Installation Manager Location Diversity allows users to assign a default value for the FCCS Location Diversity. This is the default value of the basic information (UGN, TN, SFC and RSC) if these values are not specified in the Location Diversity commands.

Step 1 Click the ADVF tab. Figure 13-16 displays.

Figure 13-16 Location Diversity - ADVF Tab



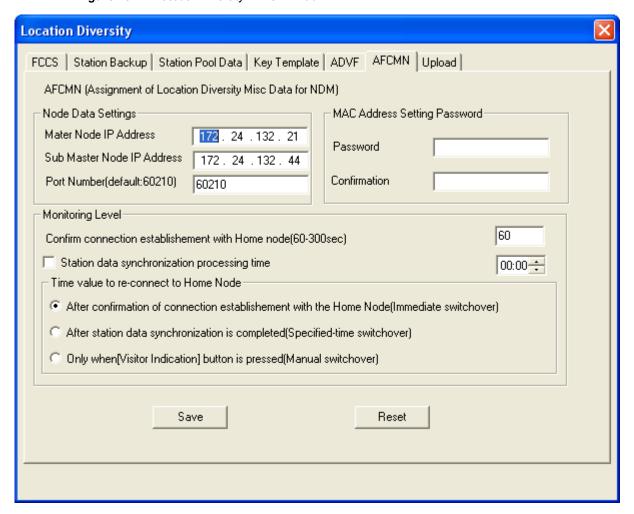
- **Step 2** Use the check boxes to select/deselect the following options, and enter their values in the related text field:
  - —Use as default value of User Group Number: UGN
  - -Use as default value of Tenant Number: TN
  - —Use as default value of Service Feature Class: SFC
  - -Use as default value of Route Service Class: RSC
- **Step 3** Click **Save** to save the ADVF data or **Reset** to restore the settings to their last previously saved values.

### **Location Diversity - AFCMN Tab**

Assignment of FCCS Location Diversity Miscellaneous Data for NDM Installation Manager Location Diversity allows users to assign FCCS Location Diversity Miscellaneous data for NDM. There are three types of default data set in this command.

Step 1 Click the AFCMN tab. Figure 13-17 displays.

Figure 13-17 Location Diversity - AFCMN Tab



- **Step 2** In the **Node Data Settings** pane, use the appropriate text field to enter values for the following items:
  - -Master Node IP Address
  - -Sub Master Node IP Address
  - —Port Number (default port is 60210)
- Step 3 In the MAC Address Setting Password pane, enter your password in the appropriate field, then enter it again to confirm it.

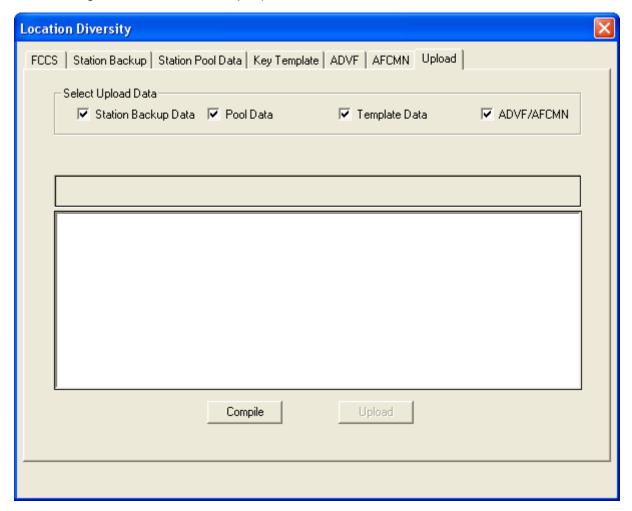
- **Step 4** In the **Monitoring Level** pane, enter a value between 60-300 seconds to specify how long a backup station waits before attempting to re-establish a connection to its original PBX.
- Step 5 (Optional) In the **Monitoring Level** pane, use the check box to specify whether you wish to specify a station data synchronization processing time, then enter a value in the related text field.
- **Step 6** Use the check boxes to control how you wish a backup station to behave when attempting to reconnect to its original PBX. The options are:
  - -Immediate Switchover
  - -Specified-time Switchover
  - -Manual Switchover
- **Step 7** Click **Save** to save the AFCMN data or **Reset** to restore the settings to their last previously saved values.

## **Location Diversity - Upload Tab**

Installation Manager Location Diversity allows users to compile and upload specific data or all of the Location Diversity data to the FCCS network.

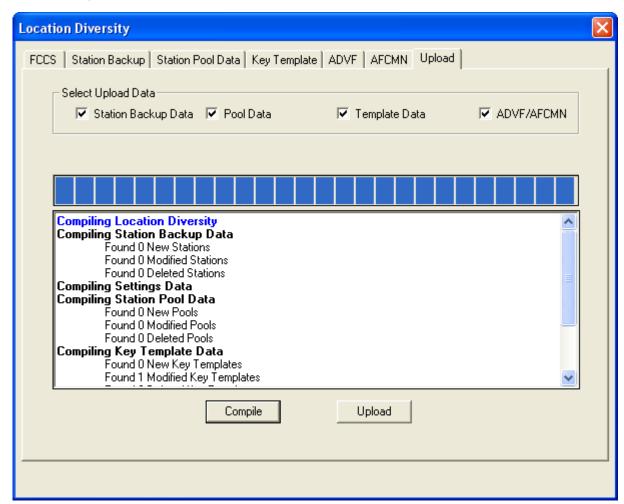
Step 1 Click the Upload tab. See Figure 13-18.

Figure 13-18 Location Diversity - Upload Tab



- Step 2 Use the **Select Upload Data** check boxes to specify the type of Location Diversity data you wish to upload, including:
  - -Station Backup Data
  - -Pool Data
  - —Template Data
  - -ADVF/AFCMN Data
- Step 3 Click Compile, the compiling process begins, identifying potential problems or conflicts with the data before the Upload process. See Figure 13-19.

Figure 13-19 Location Diversity - Upload Compile



Step 4 Clicking the **Upload** button sends all new and modified data to the fusion network.

# **Management Tab**

The Management tab (Figure 13-20) consists of the following application:

Fusion Network Manager

Allows the user to add Fusion network nodes and manage network telephone number.

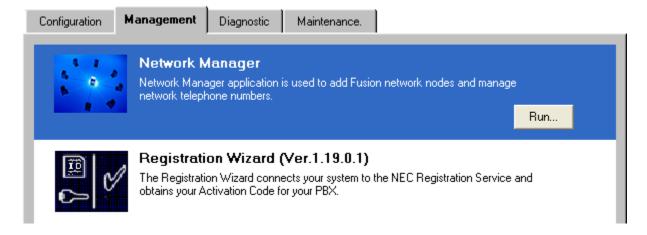


Refer to the **MA4000 Network Manager User Guide** for additional information concerning the Fusion Network Manager feature.

• Registration Wizard

Connects the system to the NEC Registration Service and obtains an Activation Code for the PBX (see *Registration Wizard ...* for additional information on this option).

Figure 13-20 Productivity Features - Management Tab



To complete the wizard, your computer must be connected to your system via direct serial cable, TCP/IP, or a modem. Also, your computer must use a modem or a TCP/IP network connection to the Internet to communicate with the NEC registration server.

During the registration process, you must provide information about your installation and setup. Some information is optional, but you must supply the required information to complete the registration process. The following information is mandatory:

- Site Information
  - Customer Site Name
  - Associate Contact Name
  - Associate Contact Phone Number
- · License information
  - Hardware Key Code

## Software Key Code



Dual CPU systems require key codes for both CPUs.

During the registration process, the wizard will connect to your system to obtain the key codes automatically.

After confirming your license information, the registration server sends the Registration Wizard an activation code. When you complete the wizard it copies this code to your system and activates it.

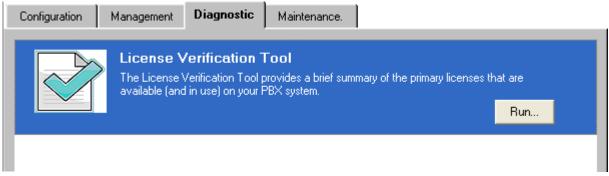
# **Diagnostic Tab**

The Diagnostic tab (Figure 13-21) consists of the following application:

• License Verification Tool

Provides a summary of the primary licenses that are available, and in use, on the PBX system (see *License Verification Tool ...* for additional information on this option).

Figure 13-21 Productivity Features - Diagnostic Tab





UNIVERGE SV8500 is not supported and the Run button is disabled.

# **Maintenance Tab**

The Maintenance tab (Figure 13-22) consists of the following applications:

• Flash Card Wizard

Formats, writes, and provides backup for PBX files to a PCMCIA flash memory card (see *Flash Card Wizard* ... for additional information on this option).

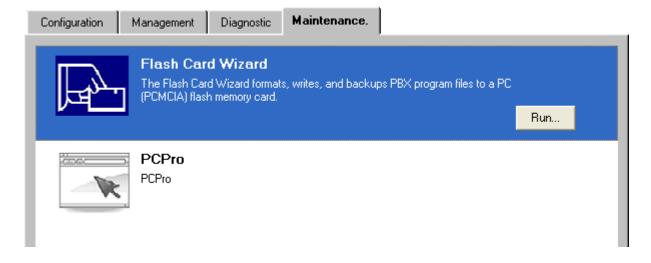


The Flash Card Wizard option is not available for UNIVERGE SV8500, and the **Run** button will be greyed out.

- This option is not available for UNIVERGE SV8500.
- PCPro

Provides centralized online HTML-based programming access, allowing administraators to manage terminals, schedule maintenance and firmware updates, and remotely make moves, additions, or changes (see *PCPro* ... for additional information on this option).

Figure 13-22 Productivity Features - Maintenance Tab



For additional information or support on this NEC Inforntia product,
contact your NEC Infrontia representative.

